

May 24, 2000

Lisha Cordova Ut. Div. of Oil, Gas, & Mining 1594 West North Temple, Suite 121 Salt Lake City, Ut. 84114

Dear Lisha,

On behalf of J. M. Huber Corporation, I am supplying an affidavit testifying that Huber has reached surface use agreements with (and paid) the Jensen family for the following APDs:

Huber-Jensen 1-9
Huber-Jensen 1-18
Huber-Jensen 2-10 (APD previously submitted)
Huber-Jensen 3-10 (APD previously submitted)
Huber-Jensen 5-10 (APD attached)
Huber-Jensen 11-10
Huber-Jensen 16-9 (APD previously submitted)

I am also requesting an exception for the Huber-Jensen 3-10 because of topography. A hill is to the west of the location which necessitates a 12' high cut as now staked. Forcing the well further west and into the hill would increase the cut more in an area of high visibility. Exception is to quarter-quarter lines (260' and 410' away), not to a well or lease. Closest lease line is 926'. Closest producing well is a >half mile away (Huber's Jensen 1-10).

Orthodox well could be drilled at 1780 FN & 1780 FE 10-12s-10e, but it would require a large cut which would be particularly visible to travelers driving north on US 191. Both the county and BLM have asked Huber to takes aesthetics into account. Request permission to drill at 1730' FNL & 1580' FEL 10-12s-10e. This is the only well in the quarter section. There are no producing wells within a half mile. Wells (see Page 11 of APD) could be drilled in 8 offsetting units. Huber is owner of all drilling units and leases within minimum 1,136' radius of the proposed exception.

I spoke with Mike Hebertson regarding the need for an on site inspection of the Huber-Jensen 3-10. Mike saw no need for another on site since it had already been on sited with BLM.

Please call me if you have any questions.

Sincerely,

Brian Wood

RECEIVED

MAY 2 5 2000

DIVISION OF OIL, GAS AND MINING

United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Utah State Office P.O. Box 45155 Salt Lake City, Utah 84145-0155

IN REPLY REFER TO: UT-922

June 5, 2000

J.M. Huber Corporation Attn: Diane Schaenen 1050 17th Street, Suite 1850 Denver, Colorado 80265

Re:

Proposed Communitization Agreement (CA)

Carbon County, Utah

Gentlemen:

On June 1, 2000, we received a completed application for a proposed communitization agreement covering the SE¼ of Section 18, Township 12 South, Range 10 East, Carbon County, Utah.

Upon review of the proposed communitization agreement, it was noted that there is no approved spacing order covering this well. As such, the State of Utah, Board of Oil, Gas and Mining should be solicited for a spacing order covering the well. An alternative would be to provide this office with sufficient geologic and engineering data based on completions, inclusive of production history, in the vicinity of the well, to justify the proposed application. Coordination with the State of Utah, Division of Oil, Gas and Mining will occur in either situation.

If you have any questions concerning the CA approval, please contact Teresa Thompson at (801) 539-4047.

Sincerely,

/s/ Robart A. Henricks

Robert A. Henricks Chief, Branch of Fluid Minerals

Enclosure

cc: Division of Oil, Gas & Mining

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JUN 0 7 2000

DIVISION OF OIL, GAS AND MINING

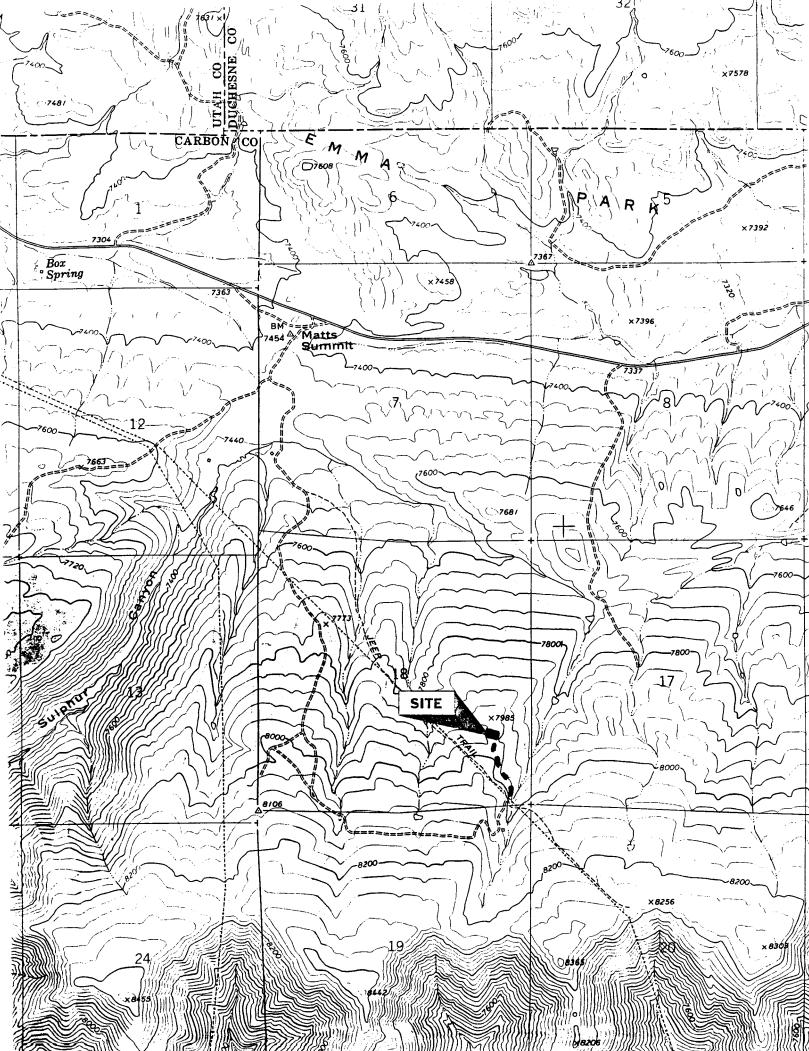
ГОЯМ 3	STAT	TE OF UTAH						
	DIVISION OF	'L, GAS AND MINING	i		5. Lease Designation and Se	PRIVATE		
	LICATION FOR PER	RMIT TO DRILL O	OR DEE: IN		6. If Indian, Allottee or Tribe	Name: N/A		
1A. Type of Work:		DEEPEN []			7. Unit Agreement Name:	N/A		
	GAS OTHER:	8. Ferm or Lease Name: HUBE	R-JENSEN					
2. Name of Operator:	R CORPORATION		9, Well Number:	1-18				
	Number: ST., SUITE 1850, D	DENVER, CO. 802	65		10. Field and Pool, or Wildo	* WILDCAT		
4. Location of Well (Footag At Surface: At Proposed Producing 2	1 590' FSL 1380 Fs	& 1590' FEL L 855 FEL	4403182 H 5/3814E		11. Otr/Otr, Section, Townsh	le Fance Meridian: 8-125-10E		
14. Distance in miles and o		S N OF HELPER			12. County: CARBON	13. State: UTAH		
15. Distance to nearest property or lease tine (270'	16. Number of acres in lease: 2,5	52.91	17. Numbe	or of acres assigned to this we	160		
		19. Proposed Depth:	20 Rote			ry or cable tools: ROTARY		
21. Elevations (show what	THE SET CO. MAN	UNGRADED			22. Approximate date work AU	ĭĠ. [™] 1, 2000		
23.	PROP	OSED CASING AND	CEMENTING PRO	GRAM				
SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	-	QUANTITY OF CEME	SX PREMIUM		
12-1/4"	8-5/8" J-55	24#	500'	ļ		0 √ @ 3,300′)		
7-7/8"	5-1/2" J-55	17#	5,000′		700 37 (1	7 (3,000)		
				 	<u>-</u>			
subsurface locations and me	OGRAM: If proposal is to deepen, give de easured and true vertical depths. Give bloom	wout preventer program, it any.						
Request exc	ception because of geo	logy (location was p	oicked to maximiz	e coal se	am thickness). I	munitize SF4		

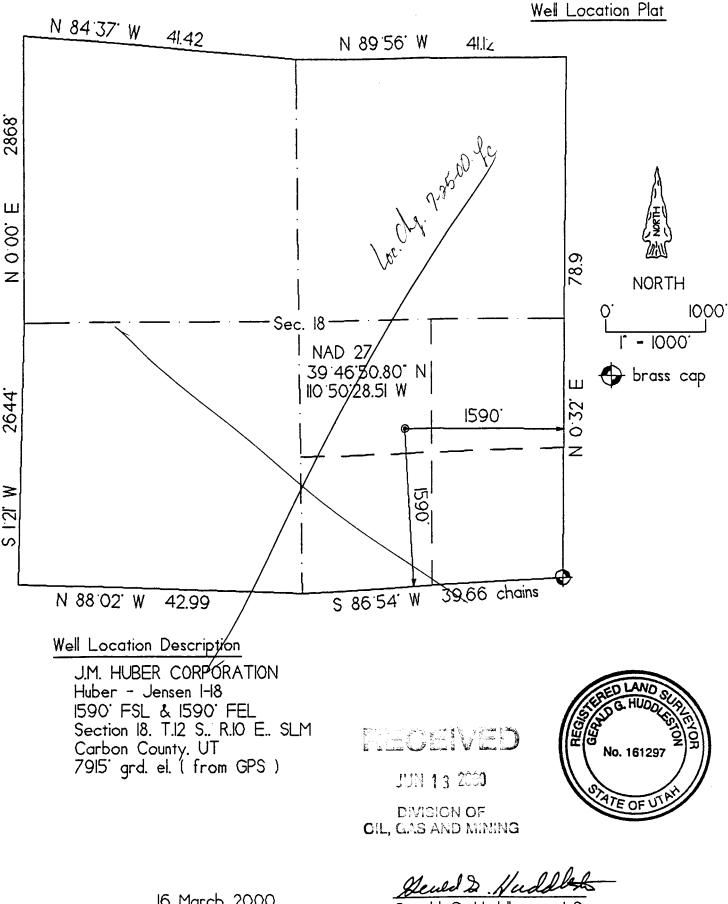
quarter-quarter lines (270' instead of >460'), not to a well. If productive, then will communitize SE4. Orthodox location would also move the well away from a highly fractured zone.

Orthodox well could be drilled at 1780 FS & 1780 FE 18-12s-10e, but it would be less productive (the applied for location has already been moved 60' from the original planned location of 1600 FS & 1650 FE due to terrain) since it would be further from the ideal fracture zone. Request permission to drill at 1590' FSL & 1590' FEL 18-12s-10e. This is the only well in the quarter section. There are no producing wells within a two miles. Wells (see Page 9) could be drilled in 8 offsetting units. Huber is owner of all drilling units and leases within minimum 1,484' radius of proposed exception. This includes all 8 directly or diagonally offsetting drilling units.

24	(505)	466-8120	CONSI	JLTANT	6-4-00
Name & Signature:	(000)		Title:		Date:
(This space for State use only) API Number Assigned: 43-007-30718	The second secon	Approved by to Utah Division	ne of ining	cc: Hube	r: Denver & Durango

DIVISION OF OIL, GAS AND MINING





16 March 2000

Gerald G. Huddleston, LS

The above is true and correct to my knowledge and belief.

Drilling Program

1. Formation Name	Depth from GL	Depth from KB	Subsea Depth
Flagstaff Ls	0'	12'	+7,915'
North Horn Fm	950'	962'	+6,965'
Price River Ss	2,275'	2,287'	+5,640'
Castle Gate Ss	3,350'	3,362'	+4,565'
Blackhawk Coal	3,625'	3,637'	+4,390'
Kenilworth Ss	4,300'	4,312'	+3,615'
Aberdeen Ss	4,500'	4,512'	+3,415'
Spring Canyon Ss	4,875'	4,887'	+3,040'
Total Depth	5,000'	5,012'	+2,915'
, o ta. 2 3pt		I unareded aroun	d lovel of 7 915')

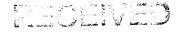
(All depths are based on an ungraded ground level of 7,915'.)

2. NOTABLE ZONES

Blackhawk coal is the primary goal. Kenilworth is a secondary goal. No other oil or gas zones are expected. Flagstaff, North Horn, and Blackhawk are anticipated water zones.

3. PRESSURE CONTROL (Also see "5." on PAGE 2)

A ≈ 10 " x 2,000 psi double ram BOP with 2,000 psi choke manifold will be used from bottom of surface casing to TD. (A typical 2,000 psi BOP is on Page 4. Actual model will not be known until the bid is let.) BOP system will be tested to 70% of the minimum internal yield before drilling the surface casing shoe. System will be tested at least once every 30 days. Tests will be recorded in the driller's log. BOPs will be inspected and operated daily to assure good mechanical working order.



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4. CASING & CEMENTING

<u>Hole Size</u>	<u>O.D.</u>	<u>Weight</u>	<u>Grade</u>	<u>Type</u>	<u>Age</u>	≈Setting Depth
12-1/4"	8-5/8"	24	J-55	ST&C	New	500'
7-7/8"	5-1/2"	17	J-55	LT&C	New	5,000'
_					71	5.6 /grl; 1.20 5/2

Surface casing will be circulated to surface with $\approx 375 \text{ sx}$ Premium cement. Long string will be cemented with DV tool set at $\approx 3,300$ '. Will use $\approx 700 \text{ sx}$ 50-50 poz with additives. Actual volumes will be determined by caliper log.

Stage 1: 15.6;1.20 ft/sk. Stage 2: Ceal-12.7;1.87; Tail-15.6;1.19. 5. MUD PROGRAM

Fresh water gel (weight = 8.3 to 8.7 ppg, viscosity = 40-55, fluid loss = NC) will be used from surface to ≈ 500 . Fresh water gel with caustic (weight = 8.7 to 9.1 ppg, viscosity = 38-45, fluid loss = 10-20 cc) will be used from surface casing shoe to TD. May also drill with air.

6. CORING, TESTING, & LOGGING

Will probably core well. May run Dual Induction Guard and Spectral Density/Dual Spaced Neutron logs.

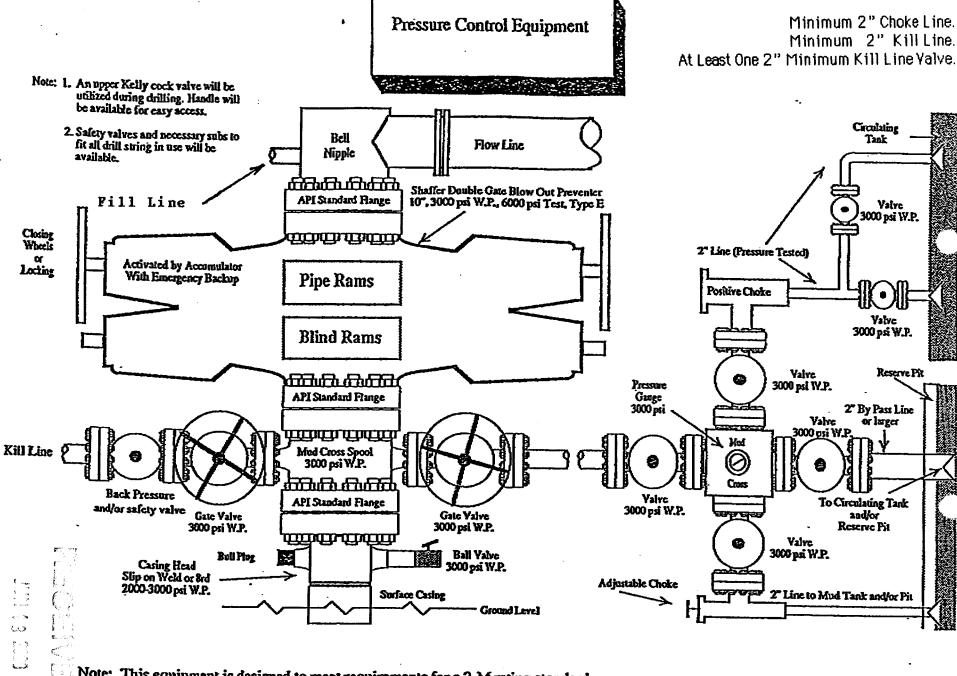
7. MISCELLANEOUS

Projected spud date is July 31, 2000. It will take \approx 2 weeks to drill the well and \approx 3 weeks to complete the well. Maximum anticipated bottom hole pressure is \approx 2,000 psi. No abnormal pressures, temperatures, or hydrogen sulfide are expected.



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Note: This equipment is designed to meet requirements for a 2-M rating standard per 43 CFR part 3160 (amended). Proper operation and testing of equipment will be caried out per standard. 2,000 psi equipment can be substituted in the drawing to meet minimum requirements per standard.

Surface Use Plan

1. EXISTING ROADS & DIRECTIONS (See PAGES 8 & 9)

From the junction of US 6 and US 191 north of Helper, Utah ...

Go NE 7.5 mi. on US 191 to Milepost 165

Then turn left and go NW 0.25 mi. on a paved road to a locked gate

Then turn left and follow a lightly graveled road SW for 1.6 mi. to a P&A well

Continue SW for 1.2 mi. on a jeep trail

Then turn right and go W 0.7 mi. on a staked route on the contour

Then return to the jeep trail and bear SW for 0.6 mi. along a ridge line

Then turn right and follow an orange flagged route NW 0.5 mi. to a jeep trail

Follow the jeep trail NE for 0.3 mi. to a powerline

Then turn left and follow the powerline road NW for 0.1 mi.

Then bear right and follow the orange flag N for 0.1 mi.

Then intersect a jeep trail and follow it N for 0.1 mi.

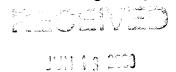
Then turn left and follow orange flags W 0.1 mi. to the well site

2. ROAD TO BE BUILT OR UPGRADED (See PAGE 8)

The gravel road will be graded to remove ruts and turn out borrow ditches. The new road will be flat bladed with a 16' wide travel surface. If production results, then all of the road from the well to the gravel will be crowned, ditched, graveled, and culverted where needed. Borrow ditches will turn out at least once every 100 yards on each side of the road. Travel surface will remain 16' and maximum disturbed width will not exceed 50'.

3. EXISTING WELLS

There are no P&A, water, oil, gas, injection, or disposal wells within a mile.





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4. PROPOSED PRODUCTION FACILITIES

Production equipment may include a dehydrator-separator, meter run, and pump. Produced fluids will flow via pipelines buried beside the road to a proposed booster facility in SENE Section 19. Facilities will be painted a flat juniper green color.

5. WATER SUPPLY

Water will be trucked from existing water wells (right #91-4983) at Huber's central production facility in Section 11.

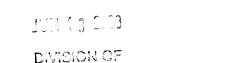
6. CONSTRUCTION MATERIALS & METHODS

Topsoil and brush will be stripped and stockpiled south of the pad. Diversion ditches will be built south and east of the pad and a berm north of the pad. A minimum $18" \times 20"$ CMP culvert will be installed in the east diversion ditch. Topsoil and brush along the new road will be windrowed beside the road. The reserve pit will be lined with minimum 12 mil plastic.

7. WASTE DISPOSAL

The reserve pit will be fenced 4' high on 3 sides with 4 strands of barbed wire or woven wire topped with barbed wire. The fourth side will be fenced once the rig moves off hole. The fence will be kept in good repair while the pit dries.

All trash will be placed in a trash cage. When full, it will be hauled to a state approved landfill. There will be no trash burning or disposal of trash in the reserve pit. Chemical toilets will be used for human waste. Their contents will be disposed of in state; approved facilities.





No oil will be allowed on the reserve pit. Any oil which accumulates on the pit will be pumped or skimmed off and hauled to a state approved recycle facility. Once dry, the reserve pit contents will be buried in place. The pit will be backfilled sufficiently deep so that no liner is exposed.

Produced water will be trucked (initially) or piped (later) to Huber's state approved evaporation pond in Section 15.

8. ANCILLARY FACILITIES

There will be no airstrip or formal camp. Camper trailers will be on site for the company man, roughnecks, mud logger, tool pusher, etc.

9. WELL SITE LAYOUT

See PAGES 10 & 11 for depictions of the well pad, cross sections, cut and fill diagrams, reserve pit, burn pit, access road onto the pad, parking, living facilities, and rig orientation.

10. RECLAMATION

After completing drilling, the well site and immediate area will be cleared of all debris and material not needed for production.

Reclamation will start when the reserve pit is dry. All areas not needed for production will be backfilled, recontoured to match natural contours, and reserved topsoil and brush evenly spread. If the well is a producer, then enough topsoil will be kept aside to reclaim the rest of the pad. Disturbed areas will be ripped, harrowed, or scarified before seeding. All reclaimed areas will be broadcast seeded in late fall or winter with seed mixes specified by the land owner or manager. Seeded areas will be left rough and lightly



DIVIDION OF

L & Law There is to be seen a

harrowed or drug with a chain after seeding.

The road will be narrowed and water barred. Water bars will be built at least half in cut and skewed to drain.

11. SURFACE OWNER

The well site, all of the pipeline route, and most of road are on land owned by the Jensen family. Contact is Jerry Jensen @ (435) 637-6242 (office). The family has signed a surface use agreement and been paid. Section 16 is state land managed by the Utah School and Institutional Trust Lands Administration for which Huber will file an easement application. Section 21 is BLM for which Huber has filed an easement application.

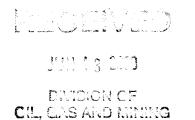
12. REPRESENTATION

Anyone having questions concerning the APD should contact:

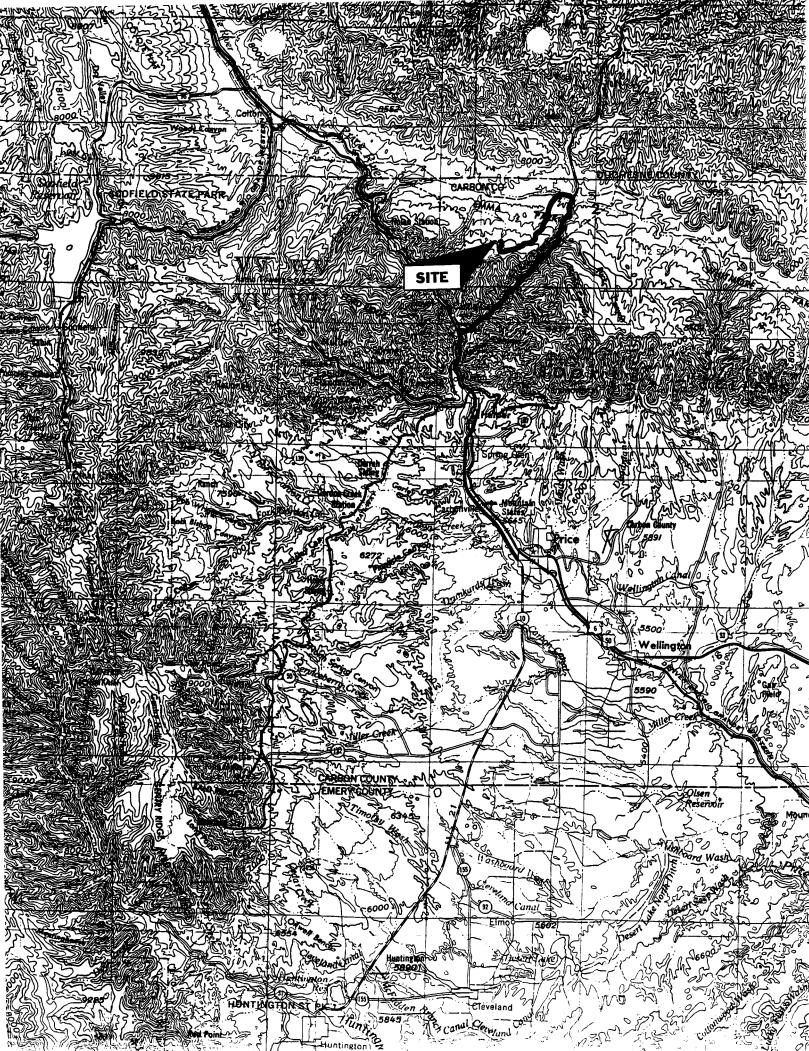
Brian Wood Permits West, Inc. 37 Verano Loop Santa Fe, NM 87505 (505) 466-8120 FAX: (505) 466-9682 Mobile: (505) 699-2276

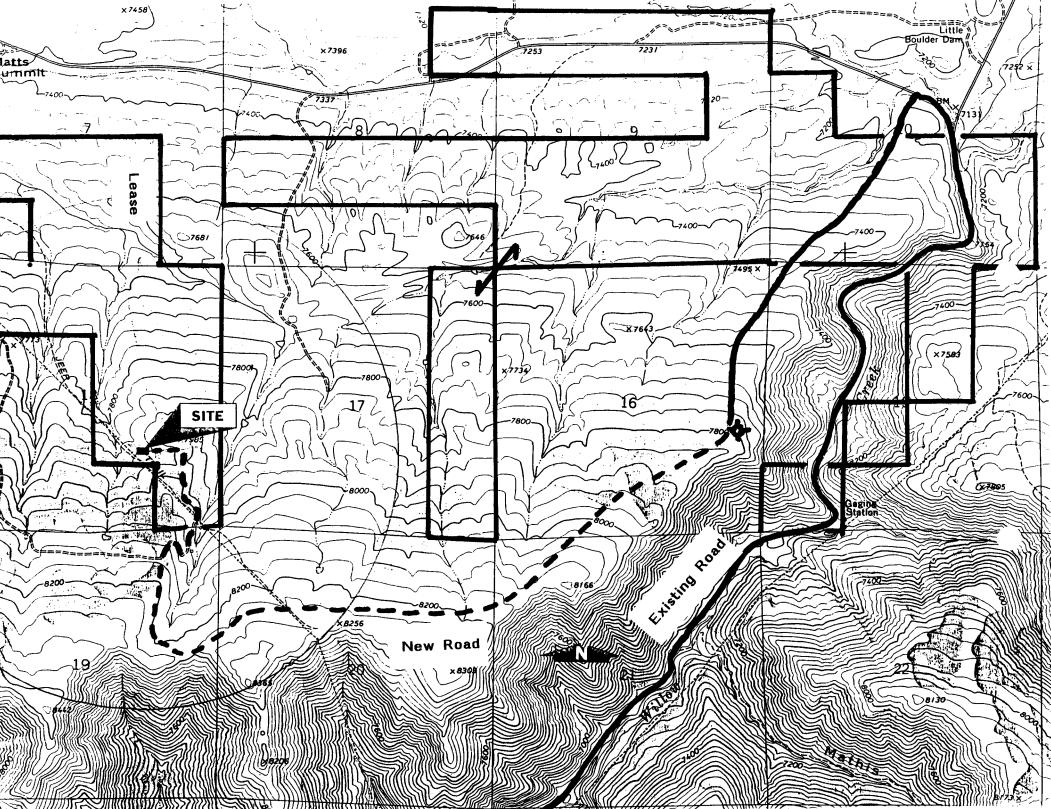
The field representatives during drilling for Huber will be:

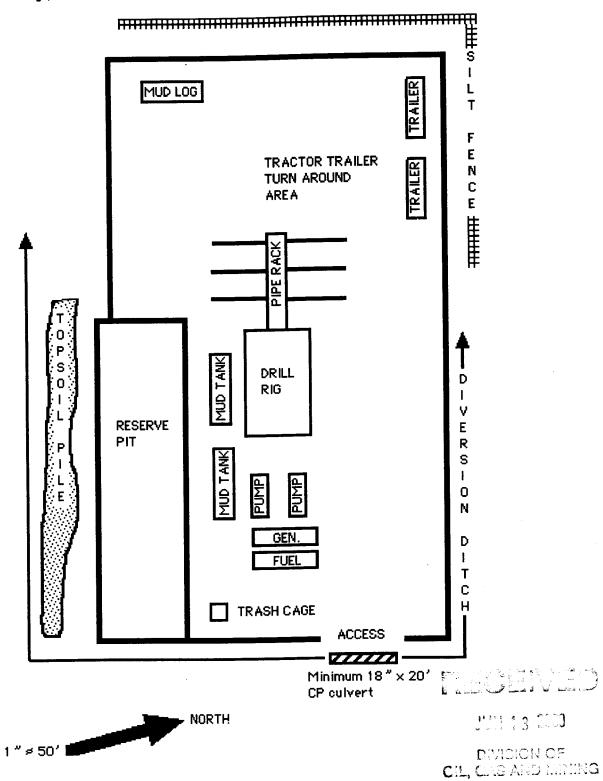
Tom Erwin & Mike Williams J. M. Huber Corporation 33587 US Highway 160 East Durango, Co. 80301 (970) 247-7708



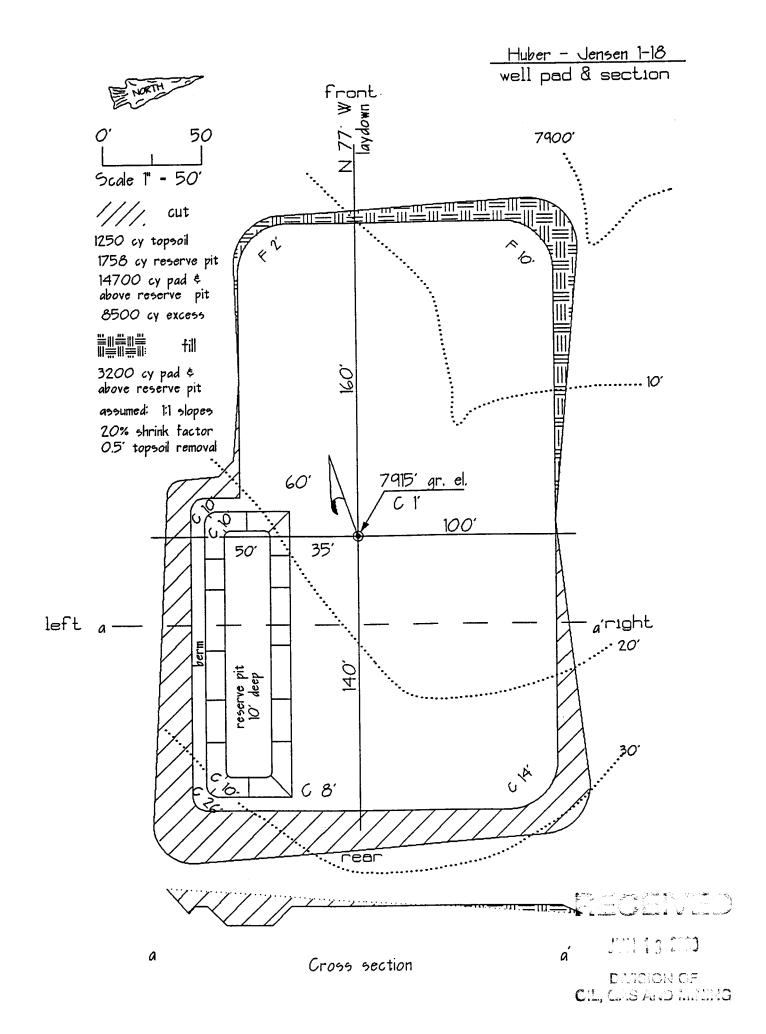














J.M. Huber Corporation

1050-17" Street
Suite 1850
Denver, CO 80265
phone: (303) 825-7900
fax: (303) 825-8300
e-mail: dvjsz@huber.com

www.huber.com

May 19, 2000

Affidavit of Completion of Surface Use Agreement

On May 1, 2000 a written surface use agreement was entered into between J. M. Huber Corporation and James T. Jensen, Jerry Jensen and Dix Jensen for the use of land connected with the Huber-Jensen 1-9, Huber-Jensen 1-18, Huber-Jensen 2-10, Huber-Jensen 3-10, Huber-Jensen 5-10, Huber-Jensen 11-10, and Huber-Jensen 16-9 wells in Carbon County, Utah.

We will abide by the conditions as stated in the Surface Use Agreement.

On behalf of J. M. Huber Corporation:

J. Scott Zimmerman

Manager – Coalbed Methane Business Unit

Date: 5-19-00

State of Colorado)

SS

County of Denver)

Subscribed and sworn to before me this 19th day of May 2000 by J. Scott Zimmerman.

Witness my hand and notarial seal.

Notary Public

100 13 100 mg/s

DYNOLON OF CIL, CAS AND ALLERIO



ENERGY

J.M. Huber Corporation

1050-17th Street Suite 1850

Denver, CO 80265 phone: (303) 825-7900 fax: (303) 825-8300

e-mail: dvjsz@huber.com

www.huber.com

May 19, 2000

Affidavit of Completion of Surface Use Agreement

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We will abide by the conditions as stated in the Surface Use Agreement.

On behalf of J. M. Huber Corporation:

1. Scott Zimmerman
Manager - Coalbed Methane Business Unit

State of Colorado)

Ss
County of Denver)

Subscribed and sworn to before me this 19th day of May 2000 by J. Scott Zimmerman.

Witness my hand and notarial seal.

My commission expires:

1. Scott Zimmerman
Manager - Coalbed Methane Business Unit

Manager - Coalbed Methane Business Unit

Subscribed Methane Business Unit

1. Scott Zimmerman
Manager - Coalbed Methane Business Unit

Subscribed Methane Business Unit

Methane Business Unit

Methane Business Unit

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Notary Public

WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVE	D: 06/13/2000	API NO. ASSIGN	NED: 43-007-30	718
WELL NAME:	HUBER-JENSEN 1-18	AMEND	ED	4
OPERATOR:	J M HUBER CORPORATION (N2380)		منت هم	
	BRIAN WOOD, AGENT	,		
CONTACT.	EXTEN WOOD, AGENT	PHONE NUMBER:	05-466-8120	
PROPOSED LO		INSPECT LOCATI	N BY: /	/
VESE NWSE SURFACE:	18 120S 100E 1 590 FSL 1590 FE L <i>1380</i> FSL 855 FE		Initials	·
	1590 FSL 1590 FEL 1380 FSL 855 FE	Engineering		Date
CARBON			RYL	8-16-00
WILDCAT	(1)	Geology		
LEASE TYPE: LEASE NUMBER		Surface		
SURFACE OWNE	ER: 4-Fee RMATION: BLKHK			
Plat Bond: (No. N Potash Water (No. SRDCC R (Date	Fed[] Ind[] Sta[] Fee[4] 929 103 265 (Y/N) ale (Y/N) *190 - 5 (B) Permit 91-4983 eview (Y/N) : Dobin LTR (-26-00 Communits due rf Agreement (Y/N) 7-19-00.	R649-2-3. R649-3-2. R649-3-3. E Prilling Uni Board Cause Eff Date: Siting: Low R649-3-11.	Jnit General Exception t No:	y £ 1320' be twee
COMMENTS:	Led Prizik. (Conducted 6-30-20	Dr)		
STIPULATIONS:	1 STATEMENT OF BASIS			
	Circle Control of the			
Si	ND APD SILET	11		
	ITH APPROVAL LETTER	AND Sun	DRY SHE	ET
		_		

DIVISION OF OIL, GAS AND MINING APPLICATION FOR PERMIT TO DRILL

STATEMENT OF BASIS

Operator Name: J. M. Huber
Name & Number: Huber-Jensen #1-18
API Number: 43-007-30718
Location: 1/4,1/4 NE SE Sec. 18 T. 12 S R. 10 E County Carbon
Location. 174, 174NEGE
Geology/Ground Water:
The author donth of the curface casing is 500.8 5/8 24# cemented back to surface with 3/3 5x or
: Compart Thoro are 16 points of diversion within 1 mile of this location, which were
I was a supral parties with priority dates back to 1800. Some of these are municipal and
are wells several of these may be completed in the Blackhawk coal the interided production
and in this wall. A search made of the records at water rights showed that no water from active
water wells is being produced from below 385' and that the proposed 500 of surface casing will
acycs those zones. The several springs and diversions along the quily east of the location may not
be active, but will be protected by the surface casing and the cement at the bottom of the long
string. Produced water will be disposed of at an approved disposal facility.
Reviewer: K. Michael Hebertson Date: 28/June/2000
Surface:
The surface owner was invited and attended the pre site for this location and made several
changes to the proposed plan. Overall he was happy with the operators proposal. The surface
awar was also made aware of the winter range and habitat concerns expressed by DVVN. and the
active Sage Grouse strutting area that has been identified by DWR. He was not sympathetic to
their request and not interested in holding up work for the time frames requested. The surface
owner requested that the cattle guard be reconstructed and a better gate installed with proper
locks, he may also request some stipulation as to the winter drilling being proposed by the
Reviewer: K. Michael Hebertson Date: 28/June /2000
Conditions of Approval/Application for Permit to Drill:
1. The location will be bermed around the top outside edge.
2. Culverts, drains and water turn outs will be placed such that the road doesn't become the
preferred drainage.
3. Cut slopes will be ditched and bermed, and all fill slolpes will have berms and silt fences
to control erosion.
4. Access will be along existing roads.
5. Rip will be used to stabilize all cut and fill slopes where the location meets established
drainage and gullies.

STATE ACTIONS

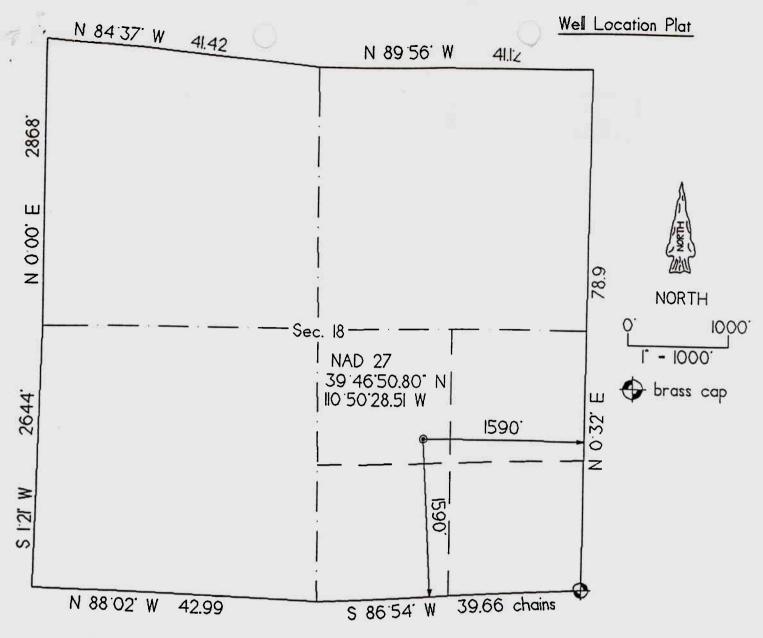
Mail to: RDCC Coordinator 116 State Capitol Salt Lake City, Utah 84114

	- THE ACENCY	2. STATE APPLICATION IDENTIFIER NUMBER:
	ADMINISTERING STATE AGENCY	(assigned by State Clearinghouse)
	OIL, GAS AND MINING	•
	1594 West North Temple, Suite 1210	TROJECT WILL START
	P.O. Box 145801 Salt Lake City, Utah 84114-5801	3. APPROXIMATE DATE PROJECT WILL START:
	Salt Lake City, Otali 64114 3001	August 1, 2000
	AREAWIDE CLEARING HOUSE(s) REC	EIVING STATE ACTIONS:
	(An he cent out by agency in block I)	
	Six Counties Association of Government	
	Six Countes reserve	/ / I and A conjection
	TYPE OF ACTION: //Lease /X/ Permit	t // License // Land Acquisition
	/_/ Land Sale /_/ Land Exch	nange /_/ Other
	TITLE OF PROPOSED ACTION:	
	Application for Permit to Drill	
 7.	DESCRIPTION:	the Huber-Jensen 1-18 (wildcat) well (undesignated) on a Private lease in presented to RDCC for consideration of resource issues affecting state
	J. M. Huber Corporation proposes to drill	the Huber-Jensen 1-18 (wildcat) well (undesignated) on a first the gresented to RDCC for consideration of resource issues affecting state ining is the primary administrative agency in this action and must issue
	County Litah This action is belli)	g presented to a milst issue
	Carbon County, Otali. Time at the	ining is the primary administrative agency in this action and made
	interests The Division of Oil, Oas and W	g presented to RDCC for consideration of resource issues differently administrative agency in this action and must issue ining is the primary administrative agency in this action and must issue
	approval before operations commence.	
	approval before operations commence.	wind) (indicate county)
8.	approval before operations commence.	wind) (indicate county)
8.	approval before operations commence. LAND AFFECTED (site location map reconverse, Section 18, Township 12 South,	quired) (indicate county) Range 10 East, Carbon County, Utah
	approval before operations commence. LAND AFFECTED (site location map reconverse, Section 18, Township 12 South,	quired) (indicate county) Range 10 East, Carbon County, Utah
	approval before operations commence.	quired) (indicate county) Range 10 East, Carbon County, Utah
9.	approval before operations commence. LAND AFFECTED (site location map reconverse, Section 18, Township 12 South, HAS THE LOCAL GOVERNMENT(s) For No.	quired) (indicate county) Range 10 East, Carbon County, Utah BEEN CONTACTED?
9.	approval before operations commence. LAND AFFECTED (site location map reconverse, Section 18, Township 12 South, HAS THE LOCAL GOVERNMENT(s) For No.	quired) (indicate county) Range 10 East, Carbon County, Utah BEEN CONTACTED?
	interests. The Division of Oil, Gas and Mapproval before operations commence. LAND AFFECTED (site location map rec NW SE, Section 18, Township 12 South, HAS THE LOCAL GOVERNMENT(s) For No POSSIBLE SIGNIFICANT IMPACTS L	quired) (indicate county) Range 10 East, Carbon County, Utah BEEN CONTACTED? IKELY TO OCCUR: rry of oil or gas in commercial quantities. Requesting exception to quarter-
9.	interests. The Division of Oil, Gas and Mapproval before operations commence. LAND AFFECTED (site location map reconverse) NW SE, Section 18, Township 12 South, HAS THE LOCAL GOVERNMENT(s) IN NO POSSIBLE SIGNIFICANT IMPACTS L Degree of impact is based on the discovery operator lines to maximize coal seam thick	quired) (indicate county) Range 10 East, Carbon County, Utah BEEN CONTACTED? IKELY TO OCCUR: ry of oil or gas in commercial quantities. Requesting exception to quarter- cness.
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9. 10.	interests. The Division of Oil, Gas and Mapproval before operations commence. LAND AFFECTED (site location map reconversely to the NW SE, Section 18, Township 12 South, HAS THE LOCAL GOVERNMENT(s) For No POSSIBLE SIGNIFICANT IMPACTS Language of impact is based on the discovery quarter lines to maximize coal seam thick NAME AND PHONE NUMBER OF DIPROJECT SITE, IF APPLICABLE:	Quired) (indicate county) Range 10 East, Carbon County, Utah BEEN CONTACTED? IKELY TO OCCUR: ry of oil or gas in commercial quantities. Requesting exception to quarter- cness. STRICT REPRESENTATIVE FROM YOUR AGENCY NEAR
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9. 10.	interests. The Division of Oil, Gas and Mapproval before operations commence. LAND AFFECTED (site location map reconversely to the NW SE, Section 18, Township 12 South, HAS THE LOCAL GOVERNMENT(s) For No POSSIBLE SIGNIFICANT IMPACTS Language of impact is based on the discovery quarter lines to maximize coal seam thick NAME AND PHONE NUMBER OF DIPROJECT SITE, IF APPLICABLE:	Quired) (indicate county) Range 10 East, Carbon County, Utah BEEN CONTACTED? IKELY TO OCCUR: ry of oil or gas in commercial quantities. Requesting exception to quarter- cness. STRICT REPRESENTATIVE FROM YOUR AGENCY NEAR NTACT: 13. SIGNATURE AND TITLE OF AUTHORIZED OFFICIAL: John R. Baza
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STATE OF UTAH

ORM 3 .	DIVISION OF	BAS AND MINING		9	5. Lease Designation and Ser	PRIVATE			
		MIT TO DOUG	OR DEE: "N		6. If Indian, Allottee or Tribe I	N/A ment Name: N/A pase Name: HUBER-JENSEN			
	CATION FOR PER	DEEPEN [7. Unit Agreement Name:	N/A			
L Type of Work: D	RILL @	DEEPEN []	81	}	8. Farm or Lease Name:				
I. Type of Well: OIL	GAS TOTHER:	SINGLE Z	ONE M.E. IPLE ID	VE []	HUBE	R-JENSEN			
Name of Operator: J. M. HUBER C	ORPORATION	(303) 825-7	900		9. Well Number:				
	., SUITE 1850, D	ENVER, CO. 802	65		10. Field and Pool, or Wildon	WILDCAT			
Location of Well (Footages) At Surface: At Proposed Producing Zone:		% 1590' FEL	4403246 N 513590 E		11. Otr/Otr, Section, Townsh	8-1725-170E			
4. Distance in miles and direction	on from nearest town or post office: 7 AIR MILES	N OF HELPER			12. COUNTY: CARBON	13. State: UTAH			
15. Distance to nearest property or lease line (foot):	270'	16. Number of acres in lease 2,5	552.91	17. Numbe	er of acres assigned to this we	160			
and the second country of the	lling. In this lease (feet): 9,332'	19. Proposed Depth:	5,000'	20. Rotary	y or cable tools:	ROTARY			
21. Elevations (show whether Di		UNGRADED			22. Approximate date work will start. AUG. 1, 2000				
	DPOP(OSED CASING AND	CEMENTING PROC	RAM					
SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH		QUANTITY OF CEME	NT DDEMILIM			
	8-5/8" J-55	24#	500'		375 SX PREMIUM 700 SX (DV @ 3,300')				
7-7/8"	5-1/2" J-55	17#	5,000'		700 SX (DV @ 3,300)				
	¥.								
						cine pertinent data 00			
Request except quarter-quarter Orthodox locat Orthodox well applied for locat to terrain) sind 1590' FEL 18	M: If proposal is to deepen, give da end true vertical depths. Give be tion because of geoder lines (270' instead in a could be drilled at a could be drilled at a could be furth a could be furt	logy (location was ead of ≥460'), no the well away from 1780 FS & 1780 en moved 60' from er from the ideal for each well in the conly well in the	picked to maximize t to a well. If pro- n a highly fractured of FE 18-12s-10e, in the original planner racture zone. Required equarter section. To	coal so ductive zone. but it ved locat est per here a	eam thickness). It is, then will come would be less protion of 1600 FS are no producing sowner of all driven	exception is to munitize SE4. Toductive (the & 1650 FE due t 1590' FSL & wells within a lling units and			
24.	rin Elos	(505) 466-	8120 CONS	SULTA	NT Dat	6-4-00			
This space for State use only) API Number Assigned:	43-007-30718	H &	Approval:	cc	-	er & Durango EIVED 3 2000			
					3011 1	•			

DIVISION OF OIL, GAS AND MINING



Well Location Description

J.M. HUBER CORPORATION
Huber - Jensen I-18
1590' FSL & 1590' FEL
Section 18. T.12 S., R.10 E., SLM
Carbon County, UT
7915' grd. el. (from GPS)

RECEIVED

JUN 13 2000

DIVISION OF OIL, GAS AND MINING



16 March 2000

Gerald G. Huddleston, LS

The above is true and correct to my knowledge and belief.

On-SITE PREDRILL EVALUATION Division of Oil, Gas and Mining

OPERATOR: J.M. Huber WELL NAME & NUMBER: Huber-Jensen #1-18 API NUMBER: 43-007-30718 FIELD/UNIT: Castlegate Field (013)

LOCATION:1/4,1/4 NE SE Sec: 18 TWP: 12S RNG: 10E 1380 FSL 855 FEL LEGAL WELL SITING: 460 F SEC. LINE; 460 F 1/4,1/4 LINE; 920 F ANOTHER WELL.

GPS COORD (UTM): X = 513,596 E; Y = 4,403,230 N

SURFACE OWNER: Jerry Jensen

PARTICIPANTS

Mike Hebertson (DOGM), Brian Wood (Permits West), Jerry Jensen

REGIONAL/LOCAL SETTING & TOPOGRAPHY

This well is located on the second bench of the Wasatch Plateau about 3 miles south of the Roan Cliffs, in the area known as Emma Park. Mathis Canyon is to the south of the location about 2 miles. The location lies at the head waters of an active stream which flows to West for about 1 ½ miles and eventually forms Sulphur Canyon and from Sulphur Canyon on to the Price River. The whole of Emma Park is open Sage Brush meadow with interspersed grass lands. The surface is of Tertiary & Cretaceous age rocks from the Flagstaff Limestone and the North Horn Conglomerate. The Flagstaff is of lacustrine origin and the North Horn is of a fluvial origin. There is no distinct contact between the two since they have many complex overlapping facies in this area.

SURFACE USE PLAN

CURRENT SURFACE USE: Open range wildlife and livestock use.

PROPOSED SURFACE DISTURBANCE: A location 300 X 200, the proposed access road will enter the pad on the northeast side requiring 16,980' of new road to be built.

LOCATION OF EXISTING WELLS WITHIN A 1 MILE RADIUS: There are no wells within one mile of this location, and the well is considered a wildcat. There are however 16 points of diversion for water rights within a mile of this location some of which are springs used for stock watering and several underground wells owned by the Price River Water Improvement district.

LOCATION OF PRODUCTION FACILITIES AND PIPELINES: Will follow the roads and already established corridors in the abandoned field area. Pipelines and power lines are still in place from previous work.

SOURCE OF CONSTRUCTION MATERIAL: Borrowed from the construction of the location. A commercial supplier will be used for the gravel pad or the material will be purchased from the landowner from a previous supply.

ANCILLARY FACILITIES: These are already in place or will not be required.

WASTE MANAGEMENT PLAN:

Portable chemical toilets which will be emptied into the municipal waste treatment system; garbage cans on location will be emptied into centralized dumpsters which will be emptied into an approved landfill. No crude oil is expected to be produced. Drilling fluid, completion / frac fluid and cutuings will be buried in the it after evaporation and slashing the pit liner. Used oil from drilling operations and support is hauled to a used oil re-cycler and re-used. Produced water will be disposed of at an approved facility.

ENVIRONMENTAL PARAMETERS

AFFECTED FLOODPLAINS AND/OR WETLANDS: The location is 1300 feet from the active stream which forms Sulphur Canyon, and several other minor qullies will be crossed in order to reach the location.

FLORA/FAUNA: Deer, Elk, Moose, Cougar, Eagles, Hawks, Other indigenous bird species, Aspen, varieties of grasses, Sage Brush, Rabbit Brush.

SOIL TYPE AND CHARACTERISTICS: Clay from the limestone which weathers to a dark tan to redish in color. Locally with sandstone inclusions and fossil trash or remains.

SURFACE FORMATION & CHARACTERISTICS: Flagstaff Limestone interbedded with the North Horn Formation which varies from a conglomerate to a thinly bedded sandstone and interfingers with the Flagstaff.

EROSION/SEDIMENTATION/STABILITY: No stability, or erosion problems with the selected site sedimentation will be mitigated with berms and diversions placed to contain runoff from the location and cut.

PALEONTOLOGICAL POTENTIAL: Not required.

RESERVE PIT

CHARACTERISTICS: The pit will be 125 X 50 X 10.

LINER REQUIREMENTS (Site Ranking Form attached): A synthetic liner will be required.

SURFACE RESTORATION/RECLAMATION PLAN

Will be signed and executed prior to issuance of the APD.

SURFACE AGREEMENT: Will be executed and affidavit will be sent to DOGM.

CULTURAL RESOURCES/ARCHAEOLOGY: Not required

OTHER OBSERVATIONS/COMMENTS

This location was moved at the time of the onsite due to it's poor locality and placement. The nearly 17,000 feet of new roadway was not inspected at the time of the pre-site as there is no Right-of-Way in place to cross the State and Federal acreage to begin the road, therefore the well will be accessed by the existing roads which are within one hundred feet of location rather than the 17,000 requested. At the time of the pre-site the surface owner requested the location change and it was agreed on by the operators representative to move it

ATTACHMENTS:

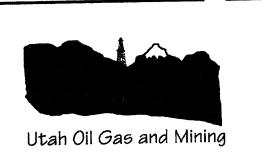
Photos were taken and will be placed on file.

K. Michael Hebertson DOGM REPRESENTATIVE

30/June/2000/ 2:00 PM DATE/TIME

Ev lation Ranking Criteria and Ranking re For Reserve and Onsite Pit Liner Requirements

For Reserve and on	3200 220		
Site-Specific Factors	Ranking	<u>Site Ra</u>	nking
Distance to Groundwater (feet) >200 100 to 200 75 to 100 25 to 75 <25 or recharge area	0 5 10 15 20	-	10
Distance to Surf. Water (feet) >1000 300 to 1000 200 to 300 100 to 200 < 100	0 2 10 15 20		15
Distance to Nearest Municipal Well (feet) >5280 1320 to 5280 500 to 1320 <500	0 5 10 20		0
Distance to Other Wells (feet) >1320 300 to 1320 <300	0 10 20		0
Native Soil Type Low permeability Mod. permeability High permeability	0 10 20		_15
Fluid Type Air/mist Fresh Water TDS >5000 and <10000 TDS >10000 or Oil Base Mud Fluid containing significant levels of hazardous constituents	0 5 10 15		_5
Drill Cuttings Normal Rock Salt or detrimental	0 10		0
Annual Precipitation (inches) <10 10 to 20 >20	0 5 10		5
Affected Populations <10 10 to 30 30 to 50 >50	0 6 8 10		0
Presence of Nearby Utility Conduits Not Present Unknown Present	0 10 15		10
Final Score 60)(Level I Sensitivity)	



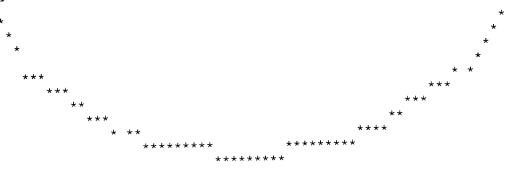
OPERATOR: J M HUBER CORP (N2380)

FIELD: WILDCAT (001)

SEC. 18, T12S, R10E,

COUNTY: CARBON SPACING: R649-3-3/EX LOC

T12S R9E	T12S R10E	HUBER-JENSEN 2-8 CASTLEGATE FIELD * FED 6-8
12		
13	18 HUBER-JENSEN 1-18 ★	17
24	19	20



UTAH DIVISION OF WATER RIGHTS NWPLAT POINT OF DIVERSION LOCATION PROGRAM

MAP	WATER RIGHT	CFS	QUANTITY AND/OR	AC-FT	SOURCE DES	DEPTH	or WELL YEAR I	INFO OG NOE		NT OF EAST		ERSION DI	ESCRIPT	ION RNG I	1	I A I P I P
0 9		.0110 WATER USE(S) Moynier, Pau	:	.00	Unnamed Spr	ring RFD #1					I	PRIORITY Price		00/00		3 84
0 <u>9</u>		.0000 WATER USE(S) Moynier, Pau	:	.00	Unnamed Str	ream RFD #1]	PRIORITY Price		00/00		្រ 84
0 9	91 1314	.0110 WATER USE(S) Moynier, Pau	:	.00	Unnamed Spi	ring RFD #1					:	PRIORITY Price		00/00		г 84
1	91 4823	10.0000 WATER USE(S) Price River	· MUNICIE	AL	Underground District		903	N	500	E 2	:050	SW 7 PRIORITY Price				К Г 84
2	91 4823	10.0000 WATER USE(S Price River	· MUNICIE	PAT.	Underground District		903	N	600	W	650	SE 7 PRIORITY Price				X T 84
3	91 4823		0	.00	Undergroun			S	650	E S	1900	NW 17 PRIORITY	12S DATE:		SL 3/1992	X

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		Price River Water	Improvement Di	istrict	P.O. B	ox 903					Price			UT	84
4	91 1316	.0110 WATER USE(S): Moynier, Paul	.00 Ur	nnamed Spi	ring RFD #1						PRIORITY Price	DATE:	00/00/	'1902 UT	. 84
5	91 1982	.0110 WATER USE(S): Moynier, Paul	.00 Ur	nnamed Sp	cing RFD #1						PRIORITY Price			UT	84
6	t92-91-	.0000 WATER USE(S): OTHE West Hazmat Oil Fi	13.00 1 R eld Services				S	660	W 2	2340	NE 14 PRIORITY Roose	DATE:	10E 07/31/	/1992	84
7	91 4823	3 10.0000 WATER USE(S): MUNI Price River Water	CTPAL				S	1900	W	700	NE 18 PRIORITY Price	DATE:	10E 04/23/	/1992	
8	91 131	.0110 WATER USE(S): Moynier, Paul	.00 ע	nnamed Sp	ring RFD #1	1					PRIORITY Price		00/00/		г 84
9	91 482	3 10.0000 WATER USE(S): MUNI Price River Water	CTPAL				S	2300	E	2000	NW 18 PRIORITY Price				
A	91 482	3 10.0000 WATER USE(S): MUNI Price River Water	.00 U CIPAL Improvement D				N	2050	E	1950	SW 17 PRIORITY Price	DATE:	10E 04/23	SL X /1992 U	
В	91 482	3 10.0000 WATER USE(S): MUNI Price River Water	TCTPAL				N	1250	E	1350	SW 18 PRIORITY Price	Z DATE:	10E 04/23	/1992	
С	91 482		.00 t	Undergrou	nd Well	S	N	700	W	650	SE 18 PRIORITY Price	Z DATE:	10E 04/23	/1992	
D	91 184	.0110 WATER USE(S): Marsing, Boyd L.	.00.	Unnamed Sj	oring Box 8	06					PRIORITY Price		00/00		т 84

RDCC Age	nda
July 11, 200	00
2	

3.	UT000622-040	Trust Lands Administration/Uintah County: Easement No. 647 - Bonneville Fuels Corp. (Sec. 36, T14S, R22E, R23E, Sec. 2, T15S, R23E). Comments due 7/15/00.
4.	UT000622-050	Trust Lands Administration/Carbon County: Easement No. 648 - Carbon County. (Sec. 19, T14S, R10E). Comments due 7/15/00.
5.	UT991117-010	Trust Lands Administration/Carbon County: Easement No. 607 - Amendment (River Gas Corp.). (Sec. 27, 34, T14S, R8E). Comments due 7/15/00.
6.	UT000626-010	Trust Lands Administration/Carbon County: Easement No. 651 - PacifiCorp. (Sec. 35, T15S, R8E, Sec. 2, 11, 12, 13, 24, 25, 26, T16S, R8E, Sec. 1, 12, 14, 23, T17S, R8E). Comments due 7/19/00.
7.	UT000626-030	DOGM/Carbon County: Application for permit to drill the Huber-Jensen 1-18 wildcat well on private lease. (Sec. 18, T12S, R10E). Comments due 7/19/00.
8.	UT000626-040	DOGM/Uintah County: Application for permit to drill the Kennedy Wash State #16-1 wildcat well on ML-47212. (Sec. 16, T18S, R23E). Comments due 7/19/00.
9.	UT000627-030	Trust Lands Administration/Iron County: SULA 1279 - Cedar Highlands. (Sec. 36, T36S, R11W). Comments due 7/20/00.
10.	UT000627-040	Trust Lands Administration/Emery County: SULA 1289. (Sec. 16, T22S, R12E). Comments due 7/20/00.
11.	UT000627-050	Trust Lands Administration/Emery County: SULA 1290. (Sec. 32, T22S, R8E). Comments due 7/20/00.
12.	UT000630-040	DOGM/Emery County: Determination of

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Form 3160-5 (June 1990)

UNITED STATES DEPARTMENT OF THE INTERIOR JUL 2 5 2000

DIVISION OF

FORM APPROVED Budget Bureau No. 1004-0135 Expires: March 31, 1993

Do not use this form for proposals to dr	AND REPORTS ON WELLS rill or to deepen or reentry to a different reservoir. R PERMIT—" for such proposals	6. If Indian, Allottee or Tribe Name N/A 7. If Unit or CA, Agreement Designation
SUBMIT	IN TRIPLICATE AMENDED	N/A
2. Name of Operator J. M. Huber Corporation	(303) 825-7900	8. Well Name and No. Huber-Jensen 1-18 9. API Well No.
3. Address and Telephone No. 1050 17th, Suite 1850, I	9escription) 4403182 N	10. Field and Pool, or Exploratory Area Wildcat 11. County or Parish, State Carbon, Ut.
BHL: Same 1380 F	SL 855 FEL 5/38/9 E (s) TO INDICATE NATURE OF NOTICE, REPO TYPE OF ACTION	RT, OR OTHER DATA
TYPE OF SUBMISSION Notice of Intent	Abandonment Recompletion	Change of Plans New Construction
Subsequent Report Final Abandonment Notice	Plugging Back Casing Repair Altering Casing Move Other	Non-Routine Fracturing Water Shut-Off Conversion to Injection Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)
	Il pertinent details, and give pertinent dates, including estimated date of starting	g any proposed work. If well is directionally drilled

been reduced by 5'.

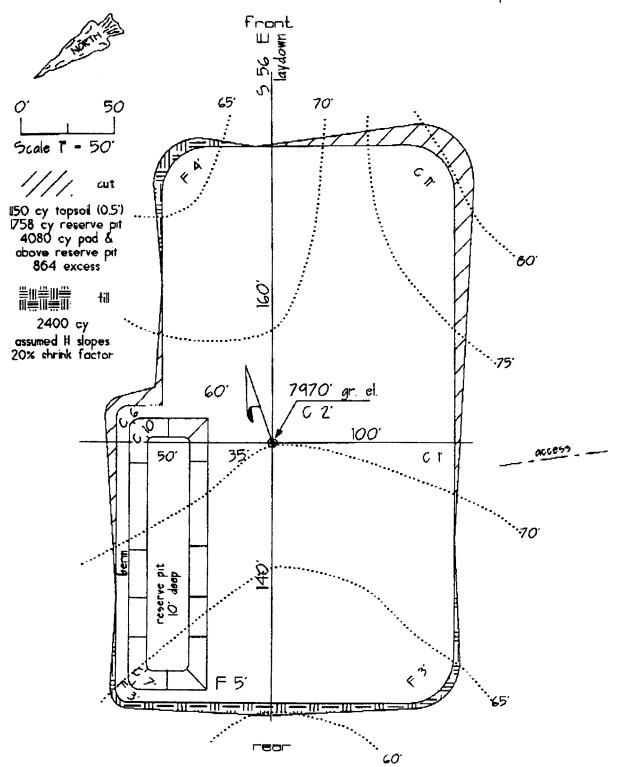
(Request exception because of geology (location was picked to maximize coal seam thickness) and terrain (at request of UDOGM and land/mineral owner). Exception is to quarter-quarter lines (60' instead of ≥460'), not to a well. If productive, then will communitize SE4. Orthodox location would also move the well away from a highly fractured zone.

Orthodox well can be drilled at 1780 FS & 860 FE 18-12s-10e, but it would be less productive (the applied for location has already been moved twice - it is now 824' from the original plan of 1600 FS & 1650 FE) since it would be further from the geologically ideal site. Request permission to drill at 1380' FSL & 855' FEE 18-12s-10e. This is the only well in the quarter section. There are no producing wells within 2 miles. Wells (see Page 9 of APD) could be drilled in 8 offsetting units. Huber is owner of all drilling units and leases within $\geq 2,174$ ' radius of proposed exception. This includes all 8 directly or diagonally offsetting drilling units.)

		cc: Scott, UDOGM
14. I hereby certify that the foregoing is true and correct Signed	Consultant (505) 466-8120	7-23-00
(This space for Federal or State office use) Approved by Conditions of approval, it any	Title	Date 8 10 80

Title 18 U.S.C. Section 1901, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction

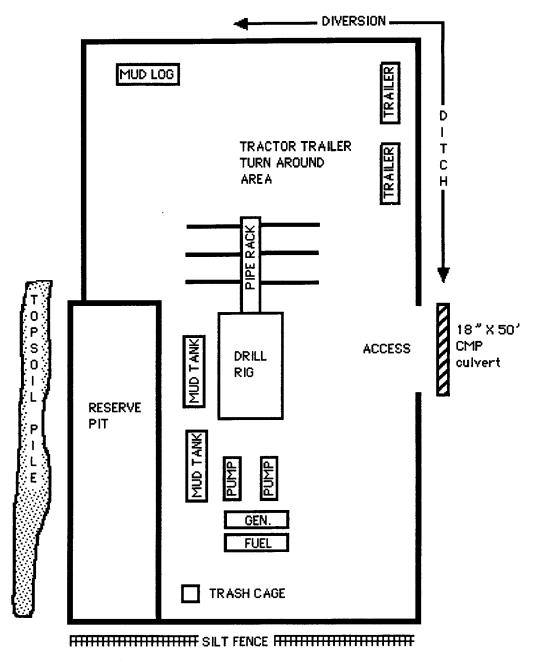
Huber - Jensen # 1 - 18 well pad



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JUL 2 5 2000

DIVISION OF OIL, GAS AND MINING



1 " = 50'

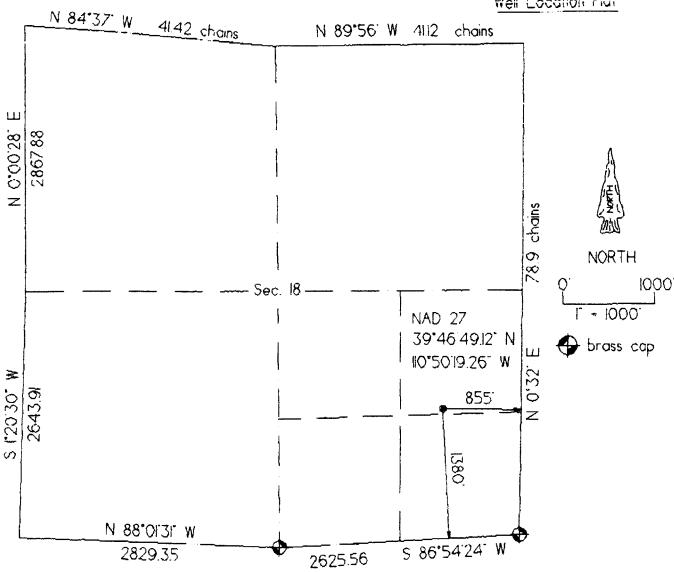
RECEIVED

JUL 2 5 2000

DIVISION OF OIL, GAS AND MINING



Well Location Plat



Well Location Description

J.M. HUBER CORPORATION
Huber - Jensen I-18
1380' FSL & 855' FEL
Section 18. T.12 S., R.10 E., SLM
Carbon County, UT
7970 grd. el. (from GPS)

RECEIVED

JUL 2 5 2000

DIVISION OF OIL, GAS AND MINING



10 July 2000

Derald D. Naddbath

Gerald G. Huddleston. LS

The above is true and correct to my knowledge and belief.

HUDDLESTON LAND SURVEYING - BOX KK - CORTEZ. CO - (970) 565 -3330

Form 3160-5 (June 1990)

UNITED STATES DEPARTMENT OF THE INTERIOR

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FORM APPROVED Budget Bureau No. 1004-0135 Expires: March 31, 1993

BUREAU OF	LAND MANAGEMENT CIL. CILS AND MINI	Case Designation and Serial No. Private
SUNDRY NOTICES	AND REPORTS ON WELLS	6. If Indian, Allottee or Tribe Name
Do not use this form for proposals to dr Use "APPLICATION FO	N/A	
SUBMIT	7. If Unit or CA, Agreement Designation N/A	
1. Type of Well Oil Well Well Other 2. Name of Operator		8. Well Name and No. Huber-Jensen 1-18
J. M. Huber Corporation	(303) 825-7900	9. API Well No.
3. Address and Telephone No.	43-007-30718	
1050 17th, Suite 1850, [10. Field and Pool, or Exploratory Area	
4. Location of Well (Footage, Sec., T., R., M., or Survey D	Wildcat	
Surface: NESE 18-12s-10	11. County or Parish, State Carbon, Ut.	
BHL: Same		
12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPOR	T, OR OTHER DATA
TYPE OF SUBMISSION	TYPE OF ACTION	
Notice of Intent	Abandonment	Change of Plans
_	Recompletion	New Construction
Subsequent Report	Plugging Back	Non-Routine Fracturing
	Casing Repair	Water Shut-Off
Final Abandonment Notice	Altering Casing Water, Road, Cement	Conversion to Injection
	Other	Dispose Water (Note: Report results of multiple completion on Well
		Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled. give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

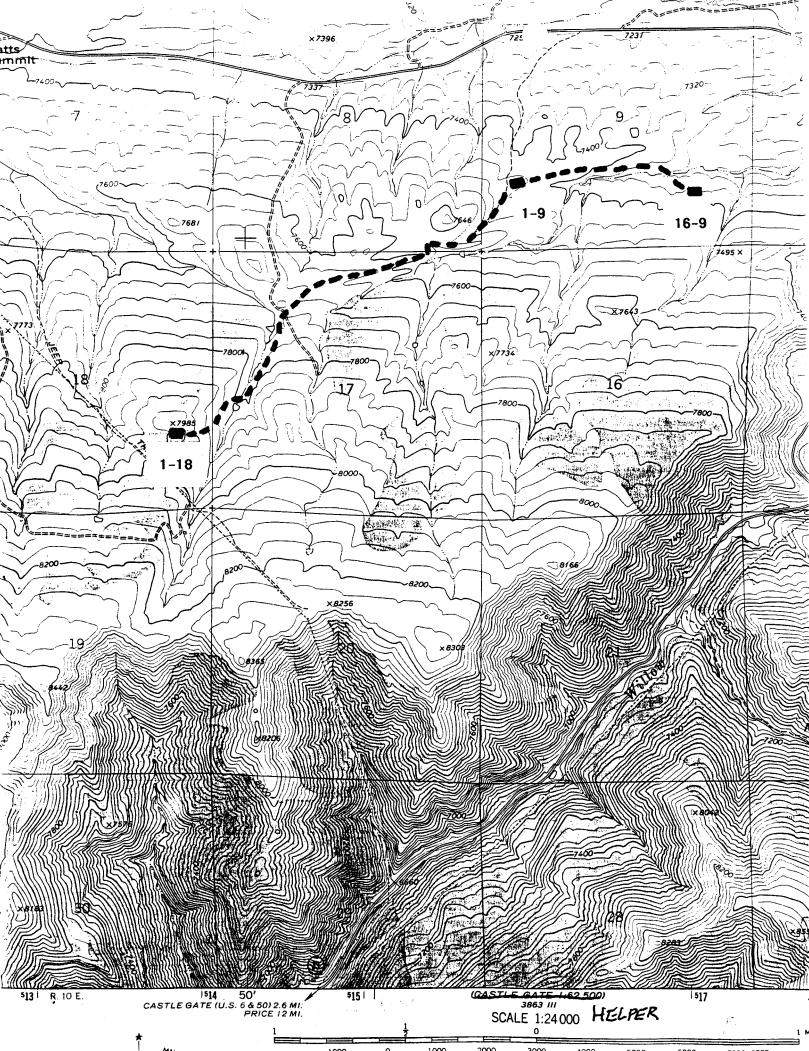
As discussed between Gil Hunt and Reed Scott, will use Huber's own produced water from its own wells as water source when drilling below 1500' in this and all future Huber wells.

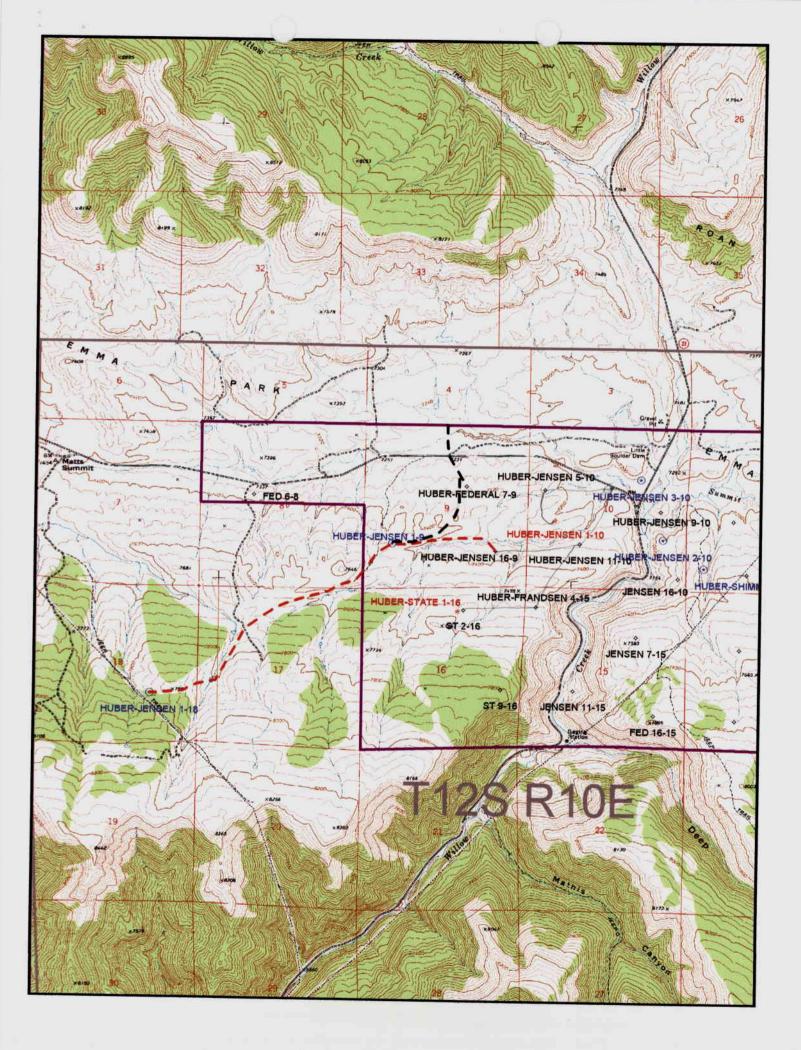
As a result of change in drilling plans (wells are planned for SE4 Sec. 8 and N2 Sec. 17), access has been changed. All of new route is on same land owner (who also happens to be mineral owner) who has agreed to change.

Surface casing cement weight = 15.6 ppg and yield = 1.20 cu ft/sk First stage long string cement weight = 15.6 ppg and yield = 1.20 cu ft/sk Second stage lead long string cement weight = 12.7 ppg and yield = 1.87 cu ft/sk Second stage tail long string cement weight = 15.6 ppg and yield = 1.19 cu ft/sk

	109.797	cc: Scott, UDOGM
14. I hereby certify that the foregoing to true and correct Signed	Consultant (505) 466-8120	7-28-00
(This space for Federal or State office use) Approved by Conditions of approval, if any:	Title	Date

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.







Michael O. Leavitt Governor Brad T. Barber State Planning Coordinator James L. Dykmann Committee Chairman John A. Harja Executive Director

State of Utah

GOVERNOR'S OFFICE OF PLANNING AND BUDGET Resource Development Coordinating Committee

116 State Capitol Building Salt Lake City, Utah 84114 (801) 538-1027 Fax: (801) 538-1547

July 26, 2000

John Baza Division of Oil, Gas & Mining 1594 West North Temple, Suite 1210 Salt Lake City, Utah 84114-5801

SUBJECT:

Application for permit to drill the Huber-Jensen 1-18 wildcat well on private lease

State Identification Number: UT000626-030

Dear Mr. Baza:

The Resource Development Coordinating Committee (RDCC), representing the State of Utah, has reviewed this proposal. Comments from State agencies are as follows:

Division of Wildlife Resources

In regards to the subject action, the Utah Division of Wildlife Resources is primarily concerned with impacts to northern sage grouse. Northern sage grouse populations have dramatically declined over the past 50 years, and the U.S. Fish & Wildlife Service has been petitioned to list the species under the Endangered Species Act. Management of this species and its habitat is critical. The proposed wildcat well is within critical sage grouse lekking and brooding areas. We request that this well and the associated road not be constructed from April 1st through June 15th to avoid impacting grouse populations. Additionally, we suggest that Huber consult with us on the site specific location of the well, so that specific sage grouse leks can be avoided.

Secondarily, we are concerned with the impacts to deer fawning and elk calving in this area. The construction closure suggested for grouse would help avoid disturbance to big game during this critical period.

If you have any questions please call Chris Colt, Habitat Biologist, at our Price Office (435-636-0260).

Division of State History

The report states that no cultural resources were located in the project area. We, therefore, concur with the report's recommendation of <u>No Historic Properties Affected</u>

If you have questions, please contact Jim Dykmann at (801) 533-3555. (Please refer to Case No. 00-0935).

The Committee appreciates the opportunity to review this proposal. Please direct any other written questions regarding this correspondence to the Utah State Clearinghouse at the above address or call Carolyn Wright at (801) 538-1535 or John Harja at (801) 538-1559.

Sincerely,

Natalie Gochnour

State Planning Coordinator



August 9, 2000

To: Bob Krueger

Fr: Brian Wood

Phone: 505 466 8120 FAX: 505 4669682

Re: Huber-Jensen 1-18 cement

Surface casing will be circulated to surface with 365 sx Class G Premium + 2% CaCl2 + Cello Flake. Weight = 15.6 ppg. Yield = 1.20 cu ft/sk. Excess = 100%

Long string will be cemented to surface with DV tool set at ≈3,150'. Actual volumes will be determined by caliper log.

First stage (≈ 3150 ' {=DV} to TD) of long string will be cemented with 350 sx Class G Premium + 1% Microbond + 0.3% CFR-3 + 3% Halad. Weight = 15.6 ppg. Yield = 1.20 cu ft/sk. Excess = 30%

Second stage lead (≈3100' {=50' above DV} to surface) of long string will be cemented with ≈375 sx Halliburton Lite w/ 65/35 poz mix + 2% CaCl₂. Weight = 12.7 ppg. Yield = 1.87 cu ft/sk. Excess = 30%

Second stage tail ($\approx 3100^{\circ}$ {=50° above DV} to $\approx 3300^{\circ}$ {200° below DV}) of long string will be cemented with 40 sx Class G Premium + 2% CaCl₂ + Flocele. Weight = 15.6 ppg. Yield = 1.19 cu ft/sk. Excess = 30%

8-00 JM Huber HJ 1-18 Well name:

JM Huber Corp. Operator:

Project ID: Surface 43-007-30718 String type:

Carbon Co. Location:

Environment: Minimum design factors:

Design parameters: No H2S considered? Collapse: 75 °F Surface temperature: **Collapse** 1.125 Design factor 82 °F 8.330 ppg Bottom hole temperature: Mud weight: Design is based on evacuated pipe. 1.40 °F/100ft Temperature gradient:

300 ft Minimum section length:

Burst: Surface Cement top: 1.00 Design factor

Burst

Max anticipated surface 0 psi pressure:

Non-directional string. Tension: 0.433 psi/ft Internal gradient: 1.80 (J)

8 Round STC: 216 psi Calculated BHP 1.80 (J) 8 Round LTC: 1.60 (J) **Buttress:**

No backup mud specified. 1.50 (J) Premium: 1.50 (B)

Re subsequent strings: Body yield: Next setting depth:

Next mud weight: Tension is based on buoyed weight. Next setting BHP: 437 ft Neutral point: Fracture mud wt:

19.250 ppg 3,865 ft Fracture depth: 3,865 psi Injection pressure

Internal Drift Measured True Vert End Nominal Capacity Segment Run Diameter Depth Depth **Finish** Grade Weight (ft³) Size Length (in) Seq (ft) (ft) (lbs/ft) (in) 24.1 7.972 (ft) 500 500 ST&C J-55 24.00 8.625 500 1

Tension Tension **Tension Burst** Burst Burst Collapse Collapse Design Collapse Strength Run Load Design Strength Load Design Strength Factor Load (Kips) (Kips) Seq **Factor** (psi) (psi) **Factor** 23.24 J (psi) (psi) 244 10 13.64 2950 216 6.33 216 1370 1

Prepared **RJK**

Utah Dept. of Natural Resources by:

Date: August 10,2000 Salt Lake City, Utah

7,500 ft

8.330 ppg

3,245 psi

ENGINEERING STIPULATIONS: NONE

Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Collapse is based on a vertical depth of 500 ft, a mud weight of 8.33 ppg. The casing is considered to be evacuated for collapse purposes. Burst strength is not adjusted for tension.

Well name:

JM Huber Corp.

Operator: String type:

Location:

Production

Carbon Co.

8-00 JM Huber HJ 1-18

Project ID:

43-007-30718

Design parameters:

Collapse

Mud weight:

8.330 ppg

Design is based on evacuated pipe.

Minimum design factors: Collapse:

Design factor

1,125

Environment: H2S considered?

No 75 °F Surface temperature: 145 °F Bottom hole temperature: 1.40 °F/100ft Temperature gradient:

Minimum section length:

368 ft

Burst:

1.00 Design factor

Cement top:

2,653 ft

Burst

Max anticipated surface

pressure: Internal gradient: Calculated BHP

0 psi 0.433 psi/ft 2,164 psi

No backup mud specified.

Tension:

1.80 (J) 8 Round STC: 1.80 (J) 8 Round LTC: 1.60 (J) **Buttress:**

1.50 (J) Premium: 1.50 (B) Body yield:

Tension is based on buoyed weight. 4,368 ft Neutral point:

Non-directional string.

Run Seq	Segment Length	Size	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	(ft) 5000	(in) 5.5	17.00	J-55	LT&C	5000	5000	4.767	172.3
Run Seq	Collapse Load (psi) 2164	Collapse Strength (psi) 4910	Collapse Design Factor 2.27	Burst Load (psi) 2164	Burst Strength (psi) 5320	Burst Design Factor 2.46	Tension Load (Kips) 74	Tension Strength (Kips) 247	Tension Design Factor 3.33 J

Prepared **RJK**

Utah Dept. of Natural Resources

Date: August 10,2000 Salt Lake City, Utah

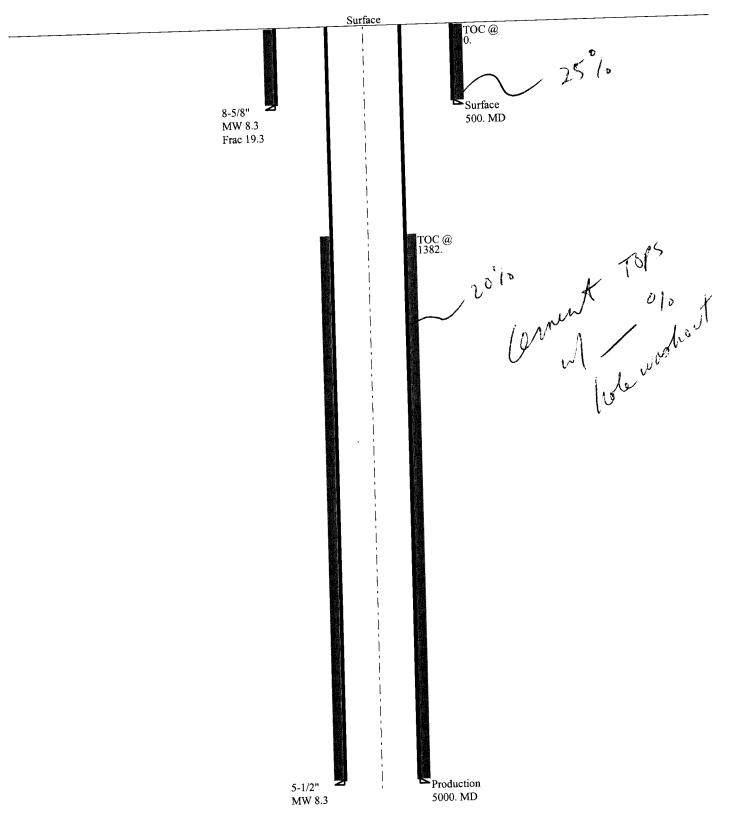
ENGINEERING STIPULATIONS: NONE

Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Collapse is based on a vertical depth of 5000 ft, a mud weight of 8.33 ppg The casing is considered to be evacuated for collapse purposes. Burst strength is not adjusted for tension.

8-00 JM Huber HJ 1-18

Casing Schematic





Michael O. Leavitt Governor Kathleen Clarke Executive Director Lowell P. Braxton

DIVISION OF OIL, GAS AND MINING

1594 West North Temple, Suite 1210 PO Box 145801 Salt Lake City, Utah 84114-5801 801-538-5340 801-359-3940 (Fax) Lowell P. Braxton Bivision Director 801-359-3940 (Fax) 801-538-7223 (TDD)

August 10, 2000

J. M. Huber Corporation 1050 Seventeenth St, Suite 1850 Denver, CO 80265

Re:

Huber-Jensen 1-18 Well, 1380' FSL, 855' FEL, NE SE, Sec. 18, T. 12 South, R. 10 East,

Carbon County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann.§ 40-6-1 et seq., Utah Administrative Code R649-3-1 et seq., and the attached Conditions of Approval, approval to drill the referenced well is granted. Appropriate information has been submitted to DOGM and administrative approval of the requested exception location is hereby granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-007-30718.

Sincerely,

6hn R. Baza

Associate Director

er

Enclosures

cc:

Carbon County Assessor

Operator:	J. M. Huber Corporation				
Well Name & Number	Huber-Jensen 1-18				
API Number:	43-007-30718				
Lease:	FEE	_			
Location: <u>NE SE</u> Sec. 18	T. <u>12 South</u> R. <u>10 East</u>				

Conditions of Approval

1. General

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

2. Notification Requirements

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- 24 hours prior to cementing or testing casing
- 24 hours prior to testing blowout prevention equipment
- 24 hours prior to spudding the well
- within 24 hours of any emergency changes made to the approved drilling program
- prior to commencing operations to plug and abandon the well

The following are Division of Oil, Gas and Mining contacts and their work telephone numbers (please leave a voice mail message if the person is not available to take the call):

- Dan Jarvis at (801) 538-5338
- Robert Krueger at (801) 538-5274 (plugging)
- Carol Daniels at (801) 538-5284 (spud)

3. Reporting Requirements

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

4. Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis. (Copy Attached)



August 16, 2001

Lisha Cordova Utah Div. of Oil, Gas, & Mining P. O. Box 145801 Salt Lake City, Ut. 84114-5801

Dear Lisha,

As we discussed this afternoon, J. M. Huber Corporation asks that approval of its Huber-Jensen 1-18 APD (43-007-30718) be extended another year.

Please call me if you have any questions.

Sincerely,

Brian Wood

RECEIVED

AUG 28 2001

DIVISION OF OIL, GAS AND MINING

cc: Johnson

Approved by the Utah Division of Oil, Gas and Mining

Date

By:

CS /21/51



September 7, 2002

Diana Mason Utah Div. of Oil, Gas, & Mining P. O. Box 145801 Salt Lake City, Ut. 84114-5801

Dear Diana,

cc:

Erwin Sessions

S. Zimmerman

J. M. Huber Corporation wishes to renew for one year the following APDs:

Huber-Frandsen/Federal 4-15 (API 43-007-30138) Huber-Jensen/Federal 1-3 (API 43-007-30732) Huber-Jensen 1-18 (API 43-007-30718)

TIZS RIDE SECTS

Please call me if you have any questions.

Sincerely,

Brian Wood

Approved by the Utah Division of Oil, Gas and Mining

RECEIVED

SEP 10 2002

DIVISION OF OIL, GAS AND MINING

Application for Permit to Drill Request for Permit Extension Validation

(this form should accompany the Sundry Notice requesting permit extension)

API: 43-007-30718 Well Name: Location:	
Company Permit Issued to: Date Original Permit Issued:	
The undersigned as owner with legal rights to drill above, hereby verifies that the information as subrapproved application to drill, remains valid and do	mitted in the previously
Following is a checklist of some items related to the verified.	e application, which should be
If located on private land, has the ownership chang agreement been updated? Yes □ No ☑	ged, if so, has the surface
Have any wells been drilled in the vicinity of the pr	
Has there been any unit or other agreements put i permitting or operation of this proposed well? Yes	
Have there been any changes to the access route of-way, which could affect the proposed location?	
Has the approved source of water for drilling chan	ged? Yes□Nol⁄☑
Have there been any physical changes to the surfaction whill require a change in plans from what was evaluation? Yes□No☑	ace location or access route s discussed at the onsite
Is bonding still in place, which covers this propose	ed well? Yes⊠No□
Edi Klin	11/4/2003
Signature	Date
Title: Consultant	
Representing: Permits West, Inc.	— DECENTED
	RECEIVED
	NOV 1 7 2003

FORM 9 STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES 5. LEASE DESIGNATION AND SERIAL NUMBER: DIVISION OF OIL, GAS AND MINING PRIVATE 6. IF INDIAN, ALLOTTEE OR TRIBE NAME: **SUNDRY NOTICES AND REPORTS ON WELLS** N/A 7. UNIT or CA AGREEMENT NAME: o not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to rill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL, form for such proposals. N/A 8. WELL NAME and NUMBER: 1. TYPE OF WELL OIL WELL GAS WELL 🔽 OTHER **Huber-JENSEN 1-18** 9. API NUMBER: 2. NAME OF OPERATOR: 43-007-30718 J. M. Huber Corporation 10. FIELD AND POOL, OR WILDCAT: PHONE NUMBER: 3. ADDRESS OF OPERATOR: Castlegate (303) 825-7900 1050 17th St, Ste. 700 Denver, CO 80265 4. LOCATION OF WELL Carbon 1380' FSL & 855' FEL COUNTY: FOOTAGES AT SURFACE: NWSE 18-12S-10E Utah STATE: QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA 11. TYPE OF ACTION TYPE OF SUBMISSION REPERFORATE CURRENT FORMATION DEEPEN ACIDIZE \square NOTICE OF INTENT FRACTURE TREAT SIDETRACK TO REPAIR WELL ALTER CASING (Submit in Duplicate) TEMPORARILY ABANDON **NEW CONSTRUCTION** Approximate date work will start: CASING REPAIR OPERATOR CHANGE TUBING REPAIR CHANGE TO PREVIOUS PLANS PLUG AND ABANDON VENT OR FLARE CHANGE TUBING WATER DISPOSAL SUBSEQUENT REPORT CHANGE WELL NAME PLUG BACK (Submit Original Form Only) WATER SHUT-OFF CHANGE WELL STATUS PRODUCTION (START/RESUME) Date of work completion: RECLAMATION OF WELL SITE COMMINGLE PRODUCING FORMATIONS OTHER: RECOMPLETE - DIFFERENT FORMATION CONVERT WELL TYPE DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent d etails including dates, depths, volumes, etc. Request APD approval be extended one year.

CHO

Approved by the Utah Division of Oil, Gas and Mining/

Date:

By:

DEC 2 9 2003

 NAME (PLEASE PRINT)
 Edie Klein (505)466-8120
 TITLE
 Consultant Fax: (505) 466-9682

 SIGNATURE
 DATE
 12/22/03

(This space for State use only)

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

RECEIVED

APR 3 0 2004

Request to Transfer Application or Permit to Drill

DIV. OF OIL, GAS & MINING

Well	name:	Huber Jensen 1-18		
	number:	4300730718		
Loca		Qtr-Qtr: NWSE Section: 18 Township: 12S Range:	10E	
Com	pany that filed original application:	J M Huber		
Date	original permit was issued:			
Com	pany that permit was issued to:	J M Huber		
Check one		Desired Action:		
	Transfer panding (unapproved) An	plication for Permit to Drill to new operator		
	The undersigned as owner with legal submitted in the pending Application f	rights to drill on the property, hereby verifies that the information as for Permit to Drill, remains valid and does not require revision. The agrees to the information and procedures as stated in the application	new	
√	Transfer approved Application for I	Permit to Drill to new operator		
	The undersigned as owner with legal information as submitted in the previor revision.	rights to drill on the property as permitted, hereby verifies that the susly approved application to drill, remains valid and does not requir	e	•
Follo	owing is a checklist of some items re	lated to the application, which should be verified.	Yes	N
	owing is a checklist of some items re ated on private land, has the ownership		Yes	├-
		o changed?	Yes	├
If loc	ated on private land, has the ownership If so, has the surface agreement beer	o changed?	Yes	✓
Have requi Have prop	ated on private land, has the ownership If so, has the surface agreement beer e any wells been drilled in the vicinity of irements for this location? e there been any unit or other agreemen osed well?	the proposed well which would affect the spacing or siting	Yes	✓
Have requi Have prop	ated on private land, has the ownership If so, has the surface agreement beer e any wells been drilled in the vicinity of irements for this location? e there been any unit or other agreemen osed well?	the proposed well which would affect the spacing or siting	Yes	✓
Have requi Have prop Have prop	ated on private land, has the ownership If so, has the surface agreement beer e any wells been drilled in the vicinity of irements for this location? e there been any unit or other agreemer osed well? e there been any changes to the access	changed? In updated? Ithe proposed well which would affect the spacing or siting Into put in place that could affect the permitting or operation of this Is route including ownership or right-of-way, which could affect the	Yes	N₁ ✓
Have prop	ated on private land, has the ownership If so, has the surface agreement beer e any wells been drilled in the vicinity of irements for this location? e there been any unit or other agreemer osed well? e there been any changes to the access osed location? the approved source of water for drilling	o changed? In updated? Ithe proposed well which would affect the spacing or siting Into put in place that could affect the permitting or operation of this Is route including ownership or right-of-way, which could affect the Ing changed? In esurface location or access route which will require a change in	Yes	✓
Have requi Have prop Have prop Has	ated on private land, has the ownership If so, has the surface agreement beer e any wells been drilled in the vicinity of irements for this location? e there been any unit or other agreemer osed well? e there been any changes to the access osed location? the approved source of water for drilling e there been any physical changes to the	changed? the proposed well which would affect the spacing or siting this put in place that could affect the permitting or operation of this s route including ownership or right-of-way, which could affect the g changed? the surface location or access route which will require a change in the evaluation?	Yes	,
Have prop Has Have plans Is bo	ated on private land, has the ownership If so, has the surface agreement beer e any wells been drilled in the vicinity of irements for this location? e there been any unit or other agreement osed well? e there been any changes to the access osed location? the approved source of water for drilling e there been any physical changes to the form what was discussed at the onsite onding still in place, which covers this predesired or necessary changes to either	changed? the proposed well which would affect the spacing or siting hts put in place that could affect the permitting or operation of this route including ownership or right-of-way, which could affect the g changed? the surface location or access route which will require a change in the evaluation? Toposed well? Bond No. RLB0006706 a pending or approved Application for Permit to Drill that is being tr or amended Application for Permit to Drill, Form 3, as appropriate,	ansfer	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~
Have prop Has Have plans Is bo	ated on private land, has the ownership If so, has the surface agreement beer e any wells been drilled in the vicinity of irements for this location? e there been any unit or other agreement osed well? e there been any changes to the access osed location? the approved source of water for drilling e there been any physical changes to the form what was discussed at the onsite onding still in place, which covers this pro- desired or necessary changes to either all be filed on a Sundry Notice, Form 9,	changed? the proposed well which would affect the spacing or siting hts put in place that could affect the permitting or operation of this route including ownership or right-of-way, which could affect the g changed? the surface location or access route which will require a change in the evaluation? Toposed well? Bond No. RLB0006706 a pending or approved Application for Permit to Drill that is being tr or amended Application for Permit to Drill, Form 3, as appropriate,	ansfer	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓

The person signing this form must have legal authority to represent the company or individual(s) to be listed as the new operator on the Application for Permit to Drill.

STATE OF UTAH

	MENT OF NATURAL RESOURCE ON OF OIL, GAS AND MIN		[5. LEASI	E DESIGNATION AND SERIAL NUMBER:
SUNDRY NOTI	CES AND REPORTS	ON WELI	LS	6. IF IND	NAN, ALLOTTEE OR TRIBE NAME:
Do not use this form for proposals to drill new wells, sign	nificantly deepen existing wells below curre APPLICATION FOR PERMIT TO DRILL for	nt bottom-hole depti m for such proposal	h, reenter plugged wells, or to is.	7. UNIT	or CA AGREEMENT NAME:
1. TYPE OF WELL OIL WELL	GAS WELL OTHER_				NAME and NUMBER: er-Jensen 1-18
NAME OF OPERATOR: J.M. Huber Corprotation				9. API N 4300	UMBER: 730718
3. ADDRESS OF OPERATOR: 1050 17th St, #700 CITY Denve	er _{STATE} CO _{ZIP} 8	30265	PHONE NUMBER: (303) 825-7900		D AND POOL, OR WILDCAT: llegate
4. LOCATION OF WELL				COUNTY	: Carbon
FOOTAGES AT SURFACE: 1380' FSL & 8	PARTER COMPANY OF STREET			STATE:	
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDI	Transfer (ASS), it is the widow, it is a restriction of a second of the second				UTAH
	ATE BOXES TO INDICATE		OF NOTICE, REPOR	RT, OF	R OTHER DATA
TYPE OF SUBMISSION		DEEPEN	YPE OF ACTION	<u> </u>	REPERFORATE CURRENT FORMATION
NOTICE OF INTENT	IDIZE	FRACTURE	TOEAT		SIDETRACK TO REPAIR WELL
	TER CASING	NEW CONS			TEMPORARILY ABANDON
	SING REPAIR	OPERATOR			TUBING REPAIR
	IANGE TO PREVIOUS PLANS	PLUG AND			VENT OR FLARE
	IANGE TUBING			片	WATER DISPOSAL
(Submit Original Form Only)	HANGE WELL NAME	PLUG BACK			
Date of work completion:	IANGE WELL STATUS		ON (START/RESUME)		WATER SHUT-OFF
co	DMMINGLE PRODUCING FORMATIONS	느	TION OF WELL SITE	V	OTHER: Change of Owner
	DNVERT WELL TYPE		TE - DIFFERENT FORMATION		
12. DESCRIBE PROPOSED OR COMPLETE	D OPERATIONS. Clearly show all pe	ertinent details in	cluding dates, depths, volume	es, etc.	
Effective December 1, 2003, Plea	ase change operator and c	wner from:			
J.M. Huber Corporation					
1050 17th street, Suite 700					
Denver, CO 80265					
303-825-7900					
To:					
- Our west in an Gorge	Eov Ev	ergreen:	Sant C-		
Evergreen Operating Corp 1401 17th Street, Suite 1200) FOL EVE		cott Zimmerman		
Denver, CO 80202			VP Operations 8	Enq	ineering
20.1701, 20 20202			2/6/2004	,	_
303-298-8100					
Darbara Zirara		· · -	Director of Land	- North	nern Business Unit
NAME (PLEASE PRINT) Barbara Zimmeri	IIdii	TITI	LE DIEGIOI OI LAND	7	OTT DUSTINGS OTHE
SIGNATURE BOUGOOG	. L'immerman	DA ⁻	TE/3	>/04	-

(This space for State use only)

Gifte Contract Contraction

OPERATOR CHANGE WORKSHEET

R	OUTING
1.	GLH
2.	CDW
3.	FILE

X Change of Operator (Well Sold)

5. If NO, the operator was contacted contacted on:

Designation of Agent/Operator

Operator Name Change

Merger

	anged, et	fective	:			2/1/2003		
ROM: (Old Operator): 2380-J.M. Huber Corp 1050 17th St, Ste. 700 Denver, CO 80265								
hone: 1-(303) 825-7900				Phone: 1-(303)	298-8100			
CA N	0.			Unit:				
WELL(S)								
VELL(3)	SEC	TWN	RNG	API NO	ENTITY		WELL	WELL
IAME						TYPE	TYPE	STATUS
IUBER-FRANDSEN 4-15	15	120S	100E	4300730138	11401	Federal	GW	PA
HUBER-JENSEN 3-10	10	120S		4300730703		Federal	GW	APD
HUBER-ST/F 4-11	11	120S	100E	4300730663		Federal	GW	APD
H-M FED 2-14	14	120S	100E	4300730787	<u> </u>	Federal	GW	NEW
					ļ	77	CVV	NEW
HUBER-JENSEN 2-5	05		100E	4300730810		Fee	GW_	NEW NEW
HUBER-JENSEN 4-8	08			4300730860	ļ	Fee	GW	APD
HUBER-JENSEN 2-10	10			4300730675	 	Fee	GW	PA
SHIMMIN TRUST 14-12	12			4300730169	11432		GW	NEW
HUBER-JENSEN 4-17	17			4300730858		Fee	GW	APD
HUBER-JENSEN 1-18	18			4300730718		Fee	GW	NEW
HUBER-JENSEN 2-18	18	120S	100E	4300730859	 	Fee	GW	NEW
	_			1000700700		State	GW	APD
HUBER-ST 2-16	16		100E	4300730783		State	GW	APD
HUBER-ST 3-16	16	120S	100E	4300730784	 	State	- OW	IAI D
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6. (R649-9-2)Waste Management Plan has been received on:	In Place	
7. Federal and Indian Lease Wells: The BLM and or the or operator change for all wells listed on Federal or Indian leases	BIA has approved on:	d the merger, name change, BLMBIA
8. Federal and Indian Units: The BLM or BIA has approved the successor of unit operator f	for wells listed on:	n/a
 Federal and Indian Communization Agreements (The BLM or BIA has approved the operator for all wells listed 	I within a CA on:	<u>n/a</u>
10. Underground Injection Control ("UIC") The Inject, for the enhanced/secondary recovery unit/project for the		d UIC Form 5, Transfer of Authority to) listed on: N/A
DATA ENTRY: 1. Changes entered in the Oil and Gas Database on:	5/18/2004	
2. Changes have been entered on the Monthly Operator Change	Spread Sheet on:	5/18/2004
3. Bond information entered in RBDMS on:	5/18/2004	
4. Fee/State wells attached to bond in RBDMS on:	5/18/2004	
5. Injection Projects to new operator in RBDMS on:	n/a	
STATE WELL(S) BOND VERIFICATION: 1. State well(s) covered by Bond Number:	RLB0006706	
FEDERAL WELL(S) BOND VERIFICATION: 1. Federal well(s) covered by Bond Number:	RLB0006705	
INDIAN WELL(S) BOND VERIFICATION: 1. Indian well(s) covered by Bond Number:	n/a	
FEE WELL(S) BOND VERIFICATION: 1. (R649-3-1) The NEW operator of any fee well(s) listed covered	d by Bond Number	RLB0006706
2. The FORMER operator has requested a release of liability from The Division sent response by letter on:	n their bond on: N/A	N/A
LEASE INTEREST OWNER NOTIFICATION: 3. (R649-2-10) The FORMER operator of the fee wells has been of their responsibility to notify all interest owners of this change	contacted and informe	ed by a letter from the Division N/A
COMMENTS:		

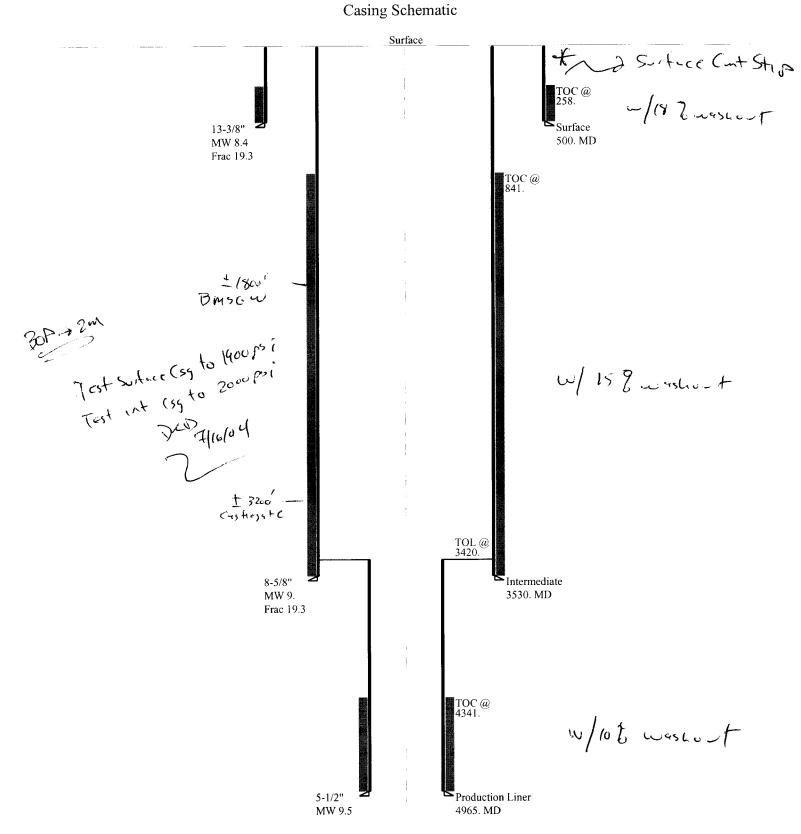
STATE OF UTAH

EDARTMENT OF NATURAL RESOURCES

DEPARTMENT OF NATURAL RESOUR	
DIVISION OF OIL, GAS AND MININ	6. Lease Designation and Senai Number
OWNERS AND DEPORTS ON	7. Indian Allottee or Tribe Name
SUNDRY NOTICES AND REPORTS ON	
Do not use this form for proposals to drill new wells, deepen existing wells, or to reenter p Use APPLICATION FOR PERMIT for such proposals	
1. Type of Well	Well Name and Number
Oil Gas Well Other (specify) ?	Huber Jensen 1-18
Name of Operator	10. API Well Number
Evergreen Operating Corporation	4300730718
3. Address of Operator	4. Telephone Number 11. Field and Pool, or Wildcat 303 298-8100 Castlegate
1401 17th Street, Suite 1200, Denver, CO 80202 5. Location of Well	303 290-0100 Custicguie
Footage 1380 FSL 855' FEL	County: Carbon
QQ, Sec, T., R., M : NESE Sec 18 T12S R10E SLM	State : UT
12 CHECK APPROPRIATE BOXES TO INDICATE	NATURE OF NOTICE, REPORT, OR OTHER DATA
NOTICE OF INTENT	SUBSEQUENT REPORT
(Submit in Duplicate)	(Submit Original Form Only)
Abandonment New Construction	Abandonment * New Construction
Casing Repair Pull or Alter Casing	Casing Repair Pull or Alter Casing
X Change of Plans Recompletion	Change of Plans Shoot or Acidize
Conversion to Injection Shoot or Acidize	Conversion to Injection Vent or Flare
Fracture Treat Vent or Flare	Fracture Treat Water Shut-Off
Multiple Completion Water Shut-Off	Other
Other	
	Date of Work Completion
Approximate Date Work Will Start	Report results of Multiple Completions and Recompletions to different reservoirs
	on WELL COMPLETION OR RECOMPLETION AND LOG form.
	* Must be accompanied by a cement verification report.
13. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinocations and measured and true vertical depths for all markers and zones pertined).	nent details, and give pertinent dates. If well is directionally drilled, give subsurface int to this work.)
Evergreen Operating requests the following change to the drilling	program to accommodate continuous coring on the
referenced well.	program to decommodate communities coming on the
Surface hole to be 17" with 13 3/8" 54.5# J-55 casing run to +/- 50	00'. Cement: 250 sx Cl-G +2% CaCl + 1/4#/sx Celloflake
Intermediate hole of 12 1/4" with 8 5/8" 32# J-55 casing run +/-50	
#/gal. Tail: 180 sx Type III + 3% Salt + 0.3% Versaset yield of	1.43 cf/sx.
Production hole: 7 7/8" +/-3230-4965' 5 1/2" Liner 17# J-55 set a	t +/- 4965' & cement with 120 sx 50:50 Poz @ 1.27 cf/sx
& 14.3 #/gal.	
	A SECUTIO OPERATOR
	7-19-04
	CHO

14. I hereby certify that the foregoing is true and correct.	
Name & Signature / A. A. L.	Title Sr Drilling Engineer Date 07/14/04
(State Use Only)	
APPROVED BY THE STATE	DD =
OF UTAH DIVISION OF	RECEIVED
and the second s	on Reverse Side JUL 1 6 2004
(8/90) See Instructions	on Reverse Side 501 6 2004
A Comment of the Comm	DIV OF OU. O.
A Surface Casing Shall be Comented back to S	DIV. OF OIL, GAS & MINING
A Surface Casing Shall of Centrales facts to s	(

05-04 Evergreen Huber Jensen 1-18rev.



Well name: 06-04 Evergreen Huber Jensen 1-18rev.

Operator: Evergreen Operating Corp

String type: Production Liner Project ID:

Location: Uintah County

Project ID:

43-007-30718

Design parameters: Collapse

Mud weight: 9.500 ppg
Design is based on evacuated pipe.

Minimum design factors: Collapse:

Design factor 1.125

Environment:

H2S considered? No
Surface temperature: 65 °F
Bottom hole temperature: 135 °F
Temperature gradient: 1.40 °F/100ft

Minimum section length: 1,500 ft

Burst:

Design factor 1.00

Cement top:

4,341 ft

<u>Burst</u>

Max anticipated surface

pressure: 1,854 psi Internal gradient: 0.120 psi/ft Calculated BHP 2,450 psi

No backup mud specified.

Tension: 8 Round STC:

 8 Round STC:
 1.80 (J)

 8 Round LTC:
 1.80 (J)

 8 Buttress:
 1.60 (J)

 9 Premium:
 1.50 (J)

 1 Body yield:
 1.50 (B)

Tension is based on air weight. Neutral point: 4,711 ft Liner top: 3,230 ft Non-directional string.

Date: July 16,2004

Salt Lake City, Utah

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (Ibs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	1765	5.5	17.00	J-55	ST&C	4965	4965	4.767	60.8
Run Seq	Collapse Load (psi) 2450	Collapse Strength (psi) 4910	Collapse Design Factor 2.004	Burst Load (psi) 2450	Burst Strength (psi) 5320	Burst Design Factor 2.17	Tension Load (Kips) 30	Tension Strength (Kips) 229	Tension Design Factor 7.63 J

Prepared Dustin K. Doucet by: Utah Div. of Oil & Mining

ENGINEERING STIPULATIONS: NONE

Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

For this liner string, the top is rounded to the nearest 100 ft.Collapse is based on a vertical depth of 4965 ft, a mud weight of 9.5 ppg. The Burst strength is not adjusted for tension.

06-04 Evergreen Huber Jensen 1-18rev. Well name:

Evergreen Operating Corp Operator:

Project ID: Intermediate String type: 43-007-30718

Uintah County Location:

Environment: Minimum design factors: Design parameters:

Collapse Mud weight: 9.000 ppg Design is based on evacuated pipe.

H2S considered? No Collapse: 65 °F Surface temperature: 1.125 Design factor Bottom hole temperature: 114 °F

1.40 °F/100ft Temperature gradient:

Minimum section length: 1,500 ft

Burst:

841 ft 1.00 Cement top: Design factor

1.50 (B)

<u>Burst</u>

Max anticipated surface

1,725 psi pressure: Internal gradient: 0.120 psi/ft

2.149 psi Calculated BHP

No backup mud specified.

Tension:

Body yield:

Neutral point:

8 Round STC: 1.80 (J) 1.80 (J) 8 Round LTC: 1.60 (J) Buttress: Premium: 1.50 (J)

Tension is based on air weight. 3,058 ft Non-directional string.

Re subsequent strings:

4,965 ft Next setting depth: 9.000 ppg Next mud weight: 2,321 psi Next setting BHP: Fracture mud wt: 19.250 ppg 3,530 ft Fracture depth: Injection pressure 3,530 psi

Run	Segment		Nominal		End	True Vert	Measured	Drift	Internal
Seq	Length (ft)	Size (in)	Weight (lbs/ft)	Grade	Finish	Depth (ft)	Depth (ft)	Diameter (in)	Capacity (ft³)
1	3530	8.625	32.00	J-55	ST&C	3530	3530	7.875	224.3
Run	Collapse	Collapse	Collapse	Burst	Burst	Burst	Tension	Tension	Tension
Seq	Load (psi)	Strength (psi)	Design Factor	Load (psi)	Strength (psi)	Design Factor	Load (Kips)	Strength (Kips)	Design Factor
1	1650	2530	1.533	2149	3930	1.83	113	372	3.29 J

Prepared Dustin K. Doucet

Utah Div. of Oil & Mining

Date: July 16,2004 Salt Lake City, Utah

ENGINEERING STIPULATIONS: NONE

Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Collapse is based on a vertical depth of 3530 ft, a mud weight of 9 ppg. The casing is considered to be evacuated for collapse purposes.

Burst strength is not adjusted for tension.

06-04 Evergreen Huber Jensen 1-18rev. Well name:

Evergreen Operating Corp Operator:

String type: Surface Project ID: 43-007-30718

Uintah County Location:

Minimum design factors: **Environment:** Design parameters:

Collapse: H2S considered? No Collapse 65 °F 1.125 Surface temperature: 8.400 ppg Design factor Mud weight: Bottom hole temperature: 72 °F Design is based on evacuated pipe.

Temperature gradient: 1.40 °F/100ft Minimum section length: 150 ft

Burst: 258 ft Design factor 1.00 Cement top:

Burst

Max anticipated surface 440 psi pressure:

Non-directional string. Internal gradient: 0.120 psi/ft Tension: 500 psi 8 Round STC: 1.80 (J) Calculated BHP

1.80 (J) 8 Round LTC: 1.60 (J) **Buttress:** No backup mud specified. Premium: 1.50 (J)

5.179

1130

1.50 (B) Re subsequent strings: Body yield: Next setting depth:

500

3,530 ft Next mud weight: 9.000 ppg Tension is based on air weight. Neutral point: Next setting BHP: 1,650 psi 438 ft 19.250 ppg Fracture mud wt: 500 ft

27

514

18.86 J

Fracture depth: Injection pressure 500 psi

5.46

Nominal End True Vert Measured Drift Internal Run Segment Diameter **Finish** Depth Depth Capacity Weight Grade Seq Length Size (ft³) (lbs/ft) (ft) (ft) (in) (ft) (in) ST&C 500 500 12.49 53.9 1 500 13.375 54.50 J-55 Run Collapse Collapse Collapse **Burst Burst Burst** Tension Tension **Tension** Seq Load Strength Design Load Strength Design Load Strength Design (psi) **Factor** (psi) **Factor** (Kips) (Kips) **Factor** (psi) (psi)

2730

Prepared Dustin K. Doucet

Date: July 16,2004 Utah Div. of Oil & Mining Salt Lake City, Utah

ENGINEERING STIPULATIONS: NONE

1

218

Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Collapse is based on a vertical depth of 500 ft, a mud weight of 8.4 ppg. The casing is considered to be evacuated for collapse purposes.

Burst strength is not adjusted for tension.

Date

03:18pm

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

FORM 6

			ENTITY ACTION	FORM					
perator:		een Operating Corpor		Operator Account Number: N 2545					
ddress:		7th Street, Suite 1200		-					
	city De			_					
	state C	0	zip 80202	-	F	hone Nu	ımber: _	(303) 298-8100	
Well 1									
API Nu	mber	Leapiggerande i Wel	l Name	QQ	Sec	Twp	Rng	County	
430073	30718	Huber Jensen 1-18		NESE	18	128	10€	Carbon	
Action	Code	Current Entity Number	New Entity Number	and the second of	pud Da		## En	tity Assignment Effective Date	
А		99999	14226		7/14/200			7/21/04	
Comment	ts:	BLKHK			•		<u> </u>	1/3//5/	
		755-7-1							
Veli 2	•	,							
API Nu	mber	ilia de la composição de l	l Name	QQ	Sec	Twp	Rng	Соинту	
Action	Code	Current Entity Number	New Entity Number	s	pud Da		En En	tity Assignment	
t al alter		of the Charles of Party of the Control of the Contr	The state of the s	i ja sagarar	1 1 1 1 1 1 1	1	restrictor	Effective Date	
Comment	·e·			1				· · · · · · · · · · · · · · · · · · ·	
Comment									
Vell 3 API Nu	mber	lange with Wel	l Name	QQ	Sec	:Twn :	- Rna	County	
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Action	Code	Current Entity	New Entity		pud Dat	A :	En	tity Assignment	
	Nijos var i dina Kijos var i dina	Number	Number		The second			ffective Date	
				1	-	·`			
Comment	s:			· ·					
	S:								
TION CODE			wall anti-	Dor	is Maly				
A - Estab		ntity for new well (single				-			
A - Estab B - Add n	ew well to	existing entity (group or	unit well)	Name	Please	Print)	h.	l.	
B - Add n C - Re-as	iew well to ssign well f	existing entity (group or	unit well) to another existing entity	Name		Print)	h	1/20/200	

(5/2000)

JUL 2 0 2004

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES

	FORM 9
	5. LEASE DESIGNATION AND SERIAL NUMBER:
	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
vells, or to	7. UNIT or CA AGREEMENT NAME:
	8. WELL NAME and NUMBER: See Attached List
	9. API NUMBER:
9001	10. FIELD AND POOL, OR WILDCAT:
	COUNTY:
	STATE: UTAH
, REPO	RT, OR OTHER DATA
N	
	REPERFORATE CURRENT FORMATION
	SIDETRACK TO REPAIR WELL
	TEMPORARILY ABANDON
	TUBING REPAIR
	VENT OR FLARE
	WATER DISPOSAL
E)	WATER SHUT-OFF
	OTHER:
ORMATION	
oths, volume	es, etc.
c and E	vergreen Resources Inc., effective
erating	(subsidiary of Evergreen
ess info	and contacts under separate cover.
	ice President, Evergreen Operatin Corp. µ2545
10/18	104
, ,	

DIVISION OF OIL, GAS AND MINING	5. LEASE DESIGNATION AND SERIAL NUMBER:
SUNDRY NOTICES AND REPORTS ON	WELLS 6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for suc	hole depth, reenter plugged wells, or to 7. UNIT or CA AGREEMENT NAME:
1. TYPE OF WELL OIL WELL GAS WELL OTHER	8. WELL NAME and NUMBER: See Attached List
2. NAME OF OPERATOR: Pioneer Natural Resources USA, Inc. N5/55	9. API NUMBER:
3. ADDRESS OF OPERATOR: 5205 N. O'Connor Blvd CITY Irving STATE TX ZIP 75039	PHONE NUMBER: 10. FIELD AND POOL, OR WILDCAT: (972) 444-9001
4. LOCATION OF WELL FOOTAGES AT SURFACE: QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:	COUNTY: STATE:
	UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NAT	TYPE OF ACTION TYPE OF ACTION
ACIDIZE NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: CASING REPAIR CHANGE TO PREVIOUS PLANS CHANGE TUBING PI CHANGE TUBING PI CHANGE WELL NAME PI CHANGE WELL STATUS PI COMMINGLE PRODUCING FORMATIONS REPORT (SUBMIT Original Form Only) Date of work completion:	REPERFORATE CURRENT FORMATION RACTURE TREAT SIDETRACK TO REPAIR WELL EW CONSTRUCTION TEMPORARILY ABANDON TUBING REPAIR LUG AND ABANDON VENT OR FLARE RODUCTION (START/RESUME) WATER SHUT-OFF TOTHER: COMPLETE - DIFFERENT FORMATION RESOURCES USA, Inc and Evergreen Resources Inc., effective The of Evergreen Operating (subsidiary of Evergreen 4.
5. Copy of Oil & Gas Geothermal Lease Bond - BLM #10409129 Name: Dennis R. Carlton Signature:	Title: Executive Vice President, Evergreen Operation Corp. N2545 Date: 10/18/04
NAME (PLEASE PRINT) SIGNATURE	TITLE Vice President, Western Division, Pioneer Natural Resources USA Inc.
(This space for State use only)	

Curling Russell (See Instructions on Reverse Side)
Division of Oil, Gas and Mining
Earlene Russell, Engineering Technician

(5/2000)

RECEIVED

OCT 2 1 2004

DIV. OF OIL, GAS & MINING

EVERGREEN TO PIONEER NATURAL RESOURCES USA, INC. MERGER WELL LIST 10/15/04

					<u> </u>		Location		Ι	T	1		T
API Well Number	Operator	Well Name	Well Type	Well Status	Field Name	County Name	(Twn-Rng)	Sect	Twpn	Twpd	RngN	RngD	Qtr/Qtr
43-007-30122-00-00	EVERGREEN OPERATING CORP	SHIMMIN TRUST 5	Gas Well	Producing	CASTLEGATE	CARBON	12S-10E	14	12	S	10	E	NWNE
43-007-30137-00-00	EVERGREEN OPERATING CORP	HUBER-FEDERAL 7-9	Gas Well	Producing	CASTLEGATE	CARBON	12S-10E	9	12	S	10	E	SWNE
43-007-30138-00-00	EVERGREEN OPERATING CORP	HUBER-FRANDSEN 4-15	Gas Well	Plugged and Abandoned	CASTLEGATE	CARBON	12S-10E	15	12	S	10	E	WWW
43-007-30140-00-00	EVERGREEN OPERATING CORP	HUBER-FED 6-8	Gas Well	Plugged and Abandoned	CASTLEGATE	CARBON	12S-10E	8	12	S	10	E	SENW
43-007-30159-00-00	EVERGREEN OPERATING CORP	HUBER-JENSEN 9-10	Gas Well	Producing	CASTLEGATE	CARBON	12S-10E	10	12	S	10	E	NESE
43-007-30162-00-00	EVERGREEN OPERATING CORP	HUBER-JENSEN 5-10	Gas Well	Producing	CASTLEGATE	CARBON	12S-10E	10	12	S	10	E	SWNW
43-007-30163-00-00	EVERGREEN OPERATING CORP	HUBER-JENSEN 16-9	Gas Well	Producing	CASTLEGATE	CARBON	12S-10E	9	12	S	10	E	SESE
43-007-30164-00-00	EVERGREEN OPERATING CORP	HUBER-JENSEN 11-10	Gas Well	Producing	CASTLEGATE	CARBON	12S-10E	10	12	S	10	E	NESW
43-007-30166-00-00	EVEDOREN OREDATING CORD	CHIEMAN TOUCT 44 44	0 14/-11	Spudded (Drilling commenced:	0407150475	048804	400 405	44	40		40	_	115014
43-007-30169-00-00	EVERGREEN OPERATING CORP	SHIMMIN TRUST 11-11	Gas Well	Not yet completed)	CASTLEGATE	CARBON	12S-10E	11		S	10	E	NESW
43-007-30589-00-00	EVERGREEN OPERATING CORP	SHIMMIN TRUST 14-12	Gas Well	Plugged and Abandoned	CASTLEGATE	CARBON	12S-10E	12		S		E	SESW
43-007-30596-00-00		HUBER-STATE 1-16	Gas Well	Producing	CASTLEGATE	CARBON	12S-10E	16		S		E	NWNE
43-007-30596-00-00	EVERGREEN OPERATING CORP	HUBER-JENSEN 1-10	Gas Well	Producing	CASTLEGATE	CARBON	12S-10E	10		S	10	E	NWSW
43-007-30659-00-00	EVERGREEN OPERATING CORP	HUBER-SHIMMIN TRUST 3-14	Gas Well	Producing	CASTLEGATE	CARBON	12S-10E	14		S	10	E	SENE
43-007-30659-00-00	EVERGREEN OPERATING CORP	HUBER-SHIMMIN TRUST 2-11	Gas Well	Producing	CASTLEGATE	CARBON	12S-10E	11		S	10	E	SESE
48-007-30082-00-00	EVERGREEN OPERATING CORP	HUBER-SHIMMIN TRUST 4-14	Gas Well	Producing	CASTLEGATE	CARBON	12S-10E	14	12	S	10	E	SENW
43-007-30673-00-00	EVERGREEN OPERATING CORP	HUBER-ST/F 4-11	Gas Well	Location Abandoned	OASTLEGATE	CARBON	120-10E		- 12	- 6	10	€	00
	EVERGREEN OPERATING CORP	HUBER-SHIMMIN TRUST 1-11	Gas Well	Producing	CASTLEGATE		12S-10E	11	12	S	10	E	SI
43-007-30674-00-00	EVERGREEN OPERATING CORP	HUBER-SHIMMIN TRUST 1-12	Gas Well	Producing	CASTLEGATE	CARBON	12S-10E	12	12	S	10	E	NW
43-007-30675-00-00	EVERGREEN OPERATING CORP	HUBER-JENSEN 2-10	Gas Well	Spudded (Drilling commenced: Not yet completed)	CASTLEGATE	CARBON	12S-10E	10	12	S		E	NESE
49-007-30703-00-00	EVERGREEN OPERATING CORP	HUBER-JENGEN 9-18	Oas Well	Location Abandoned	OASTLEGATE	GARDON	120-10E	10	12	0	10	E	SWNE.
43-007-30717-00-00	EVERGREEN OPERATING CORP	HUBER-JENSEN 1-9	Gas Well	Producing	CASTLEGATE	CARBON	12S-10E	9	12	S	10	Ε	NWSW
43-007-30718- 00-00 43-007-30733-00-0 0	EVERGREEN OPERATING CORP	HUBER-JENSEN 1-18	Gas Well	Spudded (Drilling commenced: Not yet completed)	CASTLEGATE	CARBON	12S-10E	18	12	s		E	NESE
43-007-30734-00-00	EVERGREEN OPERATING CORP	HUBER-JENSEN 1-4	Gas Well	Producing	CASTLEGATE	CARBON	12S-10E	4	12	s		E	SWSE
43-007-30735-00-00	EVERGREEN OPERATING CORP	HUBER-JENSEN 2-8	Gas Well	Producing	CASTLEGATE	CARBON	12S-10E	- 8	12	s		E	NENE
43-007-30736-00-00		HUBER-JENSEN 2-9	Gas Well	Producing	CASTLEGATE	CARBON	12S-10E	9	12	S			NENW
45 001-30730-00-00	EVERGREEN OPERATING CORP	HUBER-JENSEN 1-15	Gas Well	Producing	CASTLEGATE	CARBON	12S-10E	15	_12	S	10	E	SWNE
43-007-30764-00-00	EVERGREEN OPERATING CORP	HUBER-J/F 2-17	Gas Well	New Permit (Not yet approved or drilled)	0.107150.475							/	J
43-007-30768-00-00	EVERGREEN OPERATING CORP	HUBER-JENSEN 1-8	Gas Well		CASTLEGATE	CARBON	12S-10E	17	12	S		E	NENW
		HODEN-SENSEN 1-0	Gas vven	Producing New Permit (Not yet approved	CASTLEGATE	CARBON	12S-10E	8	12	S	10	E	NESE
43-007-30769-00-00	EVERGREEN OPERATING CORP	HUBER-JENSEN 1-17	Gas Well	or drilled)	CASTLEGATE	CARBON	12S-10E	17	12	s	10	E	NENE
43-007-30783-00-00	EVERGREEN OPERATING CORP	HUBER-ST 2-16	Gas Well	Approved permit (APD); not yet spudded	CASTLEGATE	CARBON	12S-10E	16	12	s	10	E	NWSE
43-007-3 078 4- 00-00	EVERGREEN OPERATING CORP			Approved permit (APD); not yet							-,-		
		HUBER-ST 3-16	Gas Well	spudded	CASTLEGATE	CARBON	12S-10E	16	12	S	10		SESW
45-007-30783-00-00	EVERGREEN OPERATING CORP	HUBER-ST 4-16	Gas Well	Producing	CASTLEGATE	CARBON	12S-10E	16	12	S	10	E	SEN
43-007-30787-00-00	EVERGREEN OPERATING CORP	H-M FED 2-14	Gas Well	New Permit (Not yet approved or drilled)	CASTLEGATE	CARBON	12S-10E	14	12	s	10	E	NESL.
43-007-30810-00-00	EVERGREEN OPERATING CORP	HUBER-JENSEN 2-5	Gas Well	New Permit (Not yet approved or drilled)	CASTLEGATE	CARBON	12S-10E	5	12	s	10	E	NESW
43-007-30858-00-00	EVERGREEN OPERATING CORP	HUBER-JENSEN 4-17	Gas Well	New Permit (Not yet approved or drilled)	CASTLEGATE	CARBON	12S-10E	17	12	s	10		NESE
43-007-30859-00-00	EVERGREEN OPERATING CORP	HUBER-JENSEN 2-18	Gas Well	New Permit (Not yet approved or drilled)	CASTLEGATE	CARBON	12S-10E	18	12	s	10		NENE
43-007-30860-00-00	EVERGREEN OPERATING CORP	HUBER-JENSEN 4-8		New Permit (Not yet approved		1							

EVERGREEN TO PIONEER NATURAL RESOURCES USA, INC. MERGER WELL LIST 10/15/04

API Well Number			J			1	Location			1			
API Well Number	Operator	Well Name	Well Type	Well Status	Field Name	County Name	(Twn-Rng)	Sect	Twpn	Twpd	RngN	RngD	Qtr/Qtr
43-007-30947-00-00	EVERGREEN OPERATING CORP	UNIDED EDANIDOEN/EED 4.45		New Permit (Not yet approved		l				1			
40-007-000-77-00-00	EVERGREEN OPERATING CORP	HUBER-FRANDSEN/FED 4-15	Gas Well	or drilled)	CASTLEGATE	CARBON	12S-10E	15	12	S	10	E	NWNW
		J		Spudded (Drilling commenced:		İ	i i		ļ	l	1	i	1
43-007-30961-00-00	EVERGREEN OPERATING CORP	STATE 11-16	Gas Well	Not yet completed)	0407150475	0.000				١.		l_	l
	EVENOREEN OF EIGHTING CON	STATE 11-10	Gas vveil	(Not yet completed)	CASTLEGATE	CARBON	12S-10E	16	12	s	10	E	NWNV
			j.	Spudded (Drilling commenced:		1]				İ	1	ŀ
43-007-30962-00-00	EVERGREEN OPERATING CORP	SHIMMIN 11-14	Gas Well	Not yet completed)	CASTLEGATE	CARBON	100 405		40	١.	١	_	
43-007-30786	EVERGREEN OPERATING CORP	Jensen 7-15 Deep	Gas Well	Active			12S-10E	14	12	S	10	E	NWNN
	Description of the state of the	Jensen 1-13 Deep	Gas Well	New Permit (Not yet approved	WILDCAT	CARBON	12S-10E	15	12	S	10	E	SWNE
43-007-30977-00-00	EVERGREEN OPERATING CORP	JENSEN 24-4	Gas Well	or drilled)	CASTLEGATE	CARRON	100 105	ا	40		1	-	05014
	2.01.11.00	JOEHOCH Z4-4	Gas Well	New Permit (Not yet approved	CASTLEGATE	CARBON	12S-10E	4	12	S	10	E	SESW
\$3-007-30978- 00-00	EVERGREEN OPERATING CORP	JENSEN 34-5	Gas Well	or drilled)	CASTLEGATE	CARBON	400 405	_	4.0		۱.,	F	l
		TOETTO-TO	Gas VVeii	New Permit (Not yet approved	CASTLEGATE	CARBON	12S-10E	5	12	S	10	<u> </u>	SWSE
13-007-30980-00-00	EVERGREEN OPERATING CORP	JENSEN 41-9	Gas Well	or drilled)	CASTLEGATE	CARBON	12S-10E	اہ	40	s	1	-	
			Gas Weil	New Permit (Not yet approved	CASTLEGATE	CARBON	125-10E		12	- 5	10	<u> </u>	NENE
3-007-30981-00-00	EVERGREEN OPERATING CORP	JENSEN 34-10	Gas Well	or drilled)	CASTLEGATE	CARBON	12S-10E	4.0	40			_	L
			Water Disposal	or drilloo)	CASTLEGATE	CARBON	123-10E	10	12	S	10_	<u> </u>	SWSF
3-013-32308-00-00	EVERGREEN OPERATING CORP	HUBER-ST 1-35	Well	Active	CASTLEGATE	DUGUEOUE	***			_		I_ /	1
		THOUSEN TOO	144611	New Permit (Not yet approved	CASTLEGATE	DUCHESNE	11S-10E	35	11	S	10	E	SV
3-013-32317-00-00	EVERGREEN OPERATING CORP	HUBER-STATE 1-27	Gas Well	or drilled)	WILDCAT	DUGUEOUE	440.405			_		<u> </u>	
3 017 30101 00 00	EVERGREEN OIL CORP	POISON SPRINGS U 1-USA	Oil Well	Plugged and Abandoned	WILDCAT	DUCHESNE CARFIELD	11S-10E 316-12E	27	11	S	10		SWSE
	EVERGREEN OIL CORP	POISON SPRINGS U 2 USA	Oil Well	Plugged and Abandoned	WILDOAT	GARFIELD		24	-31	6	-12		NESE
	EVERGREEN OPERATING CORP	ANDERSON FED 2	Gas Well	Producing			910-12E		- 91	-0-	-12		NENE
	EVERGREEN OPERATING CORP	FEDERAL 24-1	Gas Well	Shut-In	EAST CANYON	GRAND	16S-24E	12	16	S	24		SWSW
	EVERGREEN OPERATING CORP	FEDERAL 1-34	Gas Well		EAST CANYON	GRAND	16S-24E	24	16	S	24		NWNE
	EVERGREEN OPERATING CORP	FEDERAL 2-34	Gas Well	Producing	BRYSON CANYON		16S-24E	34	16	S	24		NESE
	EVERGREEN OPERATING CORP	BLACK HORSE 2	Gas Well	Producing	BRYSON CANYON		16S-24E	34	16	S	24		SESW
	EVERGREEN OPERATING CORP	PINE SPRING U 1	Gas Well	Shut-in	BLACK HORSE CYN		15S-24E	29	15	S	24		SESE
	EVERGREEN OPERATING CORP	RAT HOLE CYN 1		Producing	PINE SPRINGS		14S-22E	15	14	S	22		NESW
	EVERGREEN OPERATING CORP	DRY BURN U 1	Gas Well	Shut-In	RAT HOLE CANYON		14S-25E	8	14	S			NWSE
3-047-30332-00-00	EVERGREEN OPERATING CORP	1-L-23	Gas Well	Shut-In	DRY BURN		13S-25E	29	13	S			NWSE
	EVERGREEN OPERATING CORP	SWEETWATER CYN 1	Gas Well	Shut-In	SWEETWATER CYN		14S-24E	23	14	S	24	E	SWNE
	EVERGREEN OPERATING CORP	TRAPP SPRINGS 4-25-14-23	Gas Well	Shut-In	SWEETWATER CYN		14S-24E	14	14	S	24	E	SWNW
	EVERGREEN OPERATING CORP		Gas Well	Producing	MAIN CANYON		14S-23E	25	14	S	23	E	SWSW
	EVERGREEN OPERATING CORP	CROOKED CYN 13-17-14-23 WOLF UNIT 3-11-15-21	Gas Well	Producing	CROOKED CANYON		14S-23E	17	14	S	_	Е	WWW
	EVERGREEN OPERATING CORP		Gas Well	Shut-In			15S-21E	11	15	_\$_	21	E	SESW
	EVERGREEN OPERATING CORP	MAIN CYN 11-10-15-23	Gas Well	Producing			15S-23E	10	15	S	23	E	SENW
	EVERGREEN OPERATING CORP	MAIN CYN 15-8-15-23	Gas Well	Producing			15S-23E	8	15	S	23	E	NWNE
	EVERGREEN OPERATING CORP	MAIN CYN 2-8-15-23	Gas Well	Producing		UINTAH	15S-23E	8	15	S	23	E	SWSE
	EVERGREEN OPERATING CORP	MAIN CYN 7-17-15-23	Gas Well	Producing	MAIN CANYON	UINTAH	15S-23E	17	15	s	23	E	NWSE
	EVERGREEN OPERATING CORP	STATE 11-2-15-22	Gas Well	Plugged and Abandoned	MAIN CANYON	UINTAH	15S-22E	2	15	s	22	E	SENW
	EVERGREEN OPERATING CORP	TRAPP SPRINGS 6-35-14-23	Gas Well	Producing	MAIN CANYON	UINTAH	14S-23E	35	14	s			NES
		TRAPP SPRINGS 8-36-14-23	Gas Well	Producing	MAIN CANYON	UINTAH	14S-23E	36	14	s	23	E	NE.
	EVERGREEN OPERATING CORP	TRAPP SPRINGS 1-25-14-23	Gas Well	Producing	MAIN CANYON	UINTAH	14S-23E	25	14	s	23		SESE
	VERGREEN OPERATING CORP	MAIN CYN 8-7-15-23		Producing	MAIN CANYON		15S-23E	7	15	s	23		NESE
	VERGREEN OPERATING CORP	TRAPP SPRINGS 3-26-14-23		Shut-In	MAIN CANYON		14S-23E	26	14	Š	23		SESW
	VERGREEN OPERATING CORP	FEDERAL 6-14-15-21		Shut-In			15S-21E	14	15	ŝ	21		NESW
A 45 A 4 A 4 A 4 A 4 A 4 A 4 A 4 A 4 A 4	VERGREEN OPERATING CORP	SWEETWATER 6-13-14-24	Gas Well	Shut-In	SWEETWATER CYN		14S-24E	13	14	s	24		NESW
	VERGREEN OPERATING CORP	TRAPP SPRINGS 16-25-14-23	Gas Well	Producing			14S-23E	25	14	s	23		NENE
	VERGREEN OPERATING CORP	PINE SPRINGS 7-21-14-22	Gas Well	Producing			4S-22E	21	14	s			NWSE
047-31043-00-00 E	VERGREEN OPERATING CORP	MAIN CYN 4-4-15-23	Gas Well	Producing			5S-23E	- 4	15	s	_		SWSW
		The second secon							10 1	9	20 [= 1₹	2442AA
047-31045-00-00 E	VERGREEN OPERATING CORP	BLACK HORSE 14-15-15-24	Gas Well	Shut-In	SOUTH CANYON	UINTAH 1	5S-24E	15	15	s	24		NENW

EVERGREEN TO PIONEER NATURAL RESOURCES USA, INC. MERGER WELL LIST 10/15/04

				T			Location			J	T	l T	
API Well Number	Operator	Well Name	Well Type	Well Status	Field Name	County Name	(Twn-Rng)	Sect	Twpn	Twpd	RngN	RngD	Qtr/Qtr
43-047-31071-00-00	EVERGREEN OPERATING CORP	FEDERAL 7-15-15-21	Gas Well	Shut-In	WOLF POINT	UINTAH	15S-21E	15	15	S		E	NWSE
43-047-31072-00-00	EVERGREEN OPERATING CORP	MAIN CYN 6-3-15-23	Gas Well	Shut-In	MAIN CANYON	UINTAH	15S-23E	3	15	S	23	E	NESW
43-047-31073-00-00	EVERGREEN OPERATING CORP	MAIN CYN 6-8-15-23	Gas Well	Producing	MAIN CANYON	UINTAH	15S-23E	8	15	S	23	E	NESW
43-047-31074-00-00	EVERGREEN OPERATING CORP	PINE SPRINGS 13-26-14-22	Gas Well	Producing	PINE SPRINGS	UINTAH	14S-22E	26	14	S		E	NWNW
43-047-31091-00-00	EVERGREEN OPERATING CORP	FEDERAL 2-18-15-22	Gas Well	Shut-In	WOLF POINT	UINTAH	15S-22E	18	15	S	22	E	SWSE
43-047-31096-00-00	EVERGREEN OPERATING CORP	PINE SPRINGS 9-12-14-21	Gas Well	Producing	PINE SPRINGS	UINTAH	14S-21E	12	14	S	21	E	SENE
43-047-31104-00-00	EVERGREEN OPERATING CORP	BLACK HORSE 12-8-15-24	Gas Well	Shut-In	SOUTH CANYON	UINTAH	15S-24E	8	15	S	24	Ε	SWNW
43-047-31111-00-00	EVERGREEN OPERATING CORP	MAIN CYN 16-4-15-23	Gas Well	Shut-in	MAIN CANYON	UINTAH	15S-23E	4	15_	S	23	E	NENE
43-047-31134-00-00	EVERGREEN OPERATING CORP	FED ENI 7-1	Gas Well	Producing	DAVIS CANYON	UINTAH	13S-26E	7	13	S	26	E	NENE
43-047-31135-00-00	EVERGREEN OPERATING CORP	STATE 8-2-15-22	Gas Well	Shut-In	MAIN CANYON	UINTAH	15\$-22E	2	15	S	22	Е	NESE
43-047-31137-00-00	EVERGREEN OPERATING CORP	FEDERAL 5-13-15-21	Gas Well	Shut-In	WOLF POINT	UINTAH	15S-21E	13	15	S	21	Ε	NWSW
43-047-31348-00-00	EVERGREEN OPERATING CORP	FEDERAL 12-18-14-22	Gas Well	Shut-In	PINE SPRINGS	UINTAH	14S-22E	18	14	S	22	E	SWNW
43-047-34674-00-00	EVERGREEN OPERATING CORP	PINE SPRINGS FED 9-23-148-22E	Gas Well	Location Abandoned	PINE SPRINGS	UINTAH	149-22E	23		0	-22		OENE
43-047-34675-00-00	EVERGREEN OPERATING CORP	PINE SPRINGS FED 3-23-14S-22E	Gas Well	Producing	PINE SPRINGS	UINTAH	14S-22E	23	14	S	22	E	SESW
43-047-34676-00-00	EVERGREEN OPERATING CORP	PINE SPRINGS FED 12-23-14S-22E	Gas Well	Temporarily-Abandoned	PINE SPRINGS	UINTAH	14S-22E	23	14	S	22	ш	SWNW
43-047-34941-00-00	EVERGREEN OPERATING CORP	BONANZA FED 15-27-10-25	Gas Well	Producing	UNDESIGNATED	UINTAH	10S-25E	27	10	S	25	E	NWNE
43-047- 35555-00-00	EVERGREEN OPERATING CORP	PINE SPRINGS ST 6-36-14-22		Spudded (Drilling commenced: Not yet completed)	UNDESIGNATED	UINTAH	14S-22E	36	14	s	22	E	NE
43-047-35556-00-00	EVERGREEN OPERATING CORP	PINE SPRINGS FED 4-22-14-22	Gas Well	Approved permit (APD); not yet spudded	PINE SPRINGS	UINTAH	14S-22E	22	14	s	22	E	swsw
43-047-35566-00-00	EVERGREEN OPERATING CORP	PINE SPRINGS FED 15-21-14-22	Gas Well	Approved permit (APD); not yet spudded	PINE SPRINGS	UINTAH	14S-22E	21	14	s	22	Ε	NWNE

OPERATOR CHANGE WORKSHEET

ROUTING
1. GLH
2. CDW
3. FILE

Change of Operator (Well Sold)

6b. Inspections of LA PA state/fee well sites complete on:

Designation of Agent/Operator

Operator Name Change

X Merger

NS155-Pioneer Natural Resources USA, Inc. S205 N O'Connor Blvd Irving, TX 75039 I	The operator of the well(s) listed below	/ has changed, e	Hecuve); 			28/2004	·····		_
Sec	FROM: (Old Operator):				` `	•				
Second S	N2545-Evergreen Operating Corp.							, Inc.		
CA No. C	1401 17th St, Suite 1200						vd			
CA No. Unit:	Denver, CO 80202				Irving,	TX 75039				
CA No. Unit:	Phone: 1-(303) 298-8100				Phone: 1-(972)	444-9001				
SEC TWN RNG API NO ENTITY LEASE WELL WELL		CA No.			Unit:					
SEC TWN RNG API NO ENTITY LEASE TYPE	WELL(S)									
ST 1-35 35 110S 100E 4301332308 13472 State WD A	NAME	SEC	TWN	RNG	API NO				i i	
JENSEN 1-4										U
JENSEN 2-8 08 120S 100E 4300730734 13275 Fee GW P	IUBER-ST 1-35									_
JENSEN 1-8 JENSEN 1-8 JENSEN 1-8 JENSEN 1-9 JENSEN 2-9 JENSEN 1-14 JENSEN 1-15 JENSEN 1-16 JENSEN 1-18 JENSEN 1-1	HUBER-JENSEN 1-4									
JENSEN 2-9 09 120S 100E 4300730735 13317 Fee GW P IN 11-14 14 120S 100E 4300730736 13072 Fee GW DRL JENSEN 1-15 15 120S 100E 4300730736 13072 Fee GW P 17-15 DEEP 15 120S 100E 4300730786 13247 Fee GW P TA STATE 1-16 16 120S 100E 4300730785 13318 State GW P 1311-14 14 120S 100E 4300730786 13247 Fee GW P 14 15 16 16 120S 100E 4300730785 13318 State GW P 1311-16 16 16 120S 100E 4300730785 13318 State GW P 11-16 16 120S 100E 4300730785 13318 State GW P 11-16 16 120S 100E 4300730785 13318 State GW P DRL JENSEN 1-18 18 120S 100E 4300730718 14224 State GW DRL RINGS ST 6-36-14-22 36 140S 220E 4304731135 8076 State GW S ATOR CHANGES DOCUMENTATION ate after each listed item is completed	IUBER-JENSEN 2-8									
IN 11-14	HUBER-JENSEN 1-8									
STATE 1-16 16 120S 100E 4300730736 13072 Fee GW P	IUBER-JENSEN 2-9									
17-15 DEEP	SHIMMIN 11-14									
STATE 1-16	HUBER-JENSEN 1-15			·						_
ST 4-16	ENSON 7-15 DEEP									_
11-16	IUBER-STATE 1-16									_
JENSEN 1-18 18 120S 100E 4300730718 14226 Fee GW DRL PRINGS ST 6-36-14-22 36 140S 220E 4304735555 14352 State GW DRL PRINGS FED 12-23-14S-22E 23 140S 220E 4304734676 13616 Federal GW TA ATOR CHANGES DOCUMENTATION ate after each listed item is completed	HUBER-ST 4-16									_
RINGS ST 6-36-14-22 36 140S 220E 4304735555 14352 State GW DRL 8-2-15-22 02 150S 220E 4304731135 8076 State GW S RINGS FED 12-23-14S-22E 23 140S 220E 4304734676 13616 Federal GW TA ATOR CHANGES DOCUMENTATION ate after each listed item is completed	STATE 11-16									
8-2-15-22 02 150S 220E 4304731135 8076 State GW S PRINGS FED 12-23-14S-22E 23 140S 220E 4304734676 13616 Federal GW TA ATOR CHANGES DOCUMENTATION ate after each listed item is completed	HUBER-JENSEN 1-18									
PRINGS FED 12-23-14S-22E 23 140S 220E 4304734676 13616 Federal GW TA ATOR CHANGES DOCUMENTATION ate after each listed item is completed	PINE SPRINGS ST 6-36-14-22		+							_
ATOR CHANGES DOCUMENTATION ate after each listed item is completed	STATE 8-2-15-22	02	1508	220E	4304731135	8076	State	- GW	$\frac{1s}{1}$	_
ate after each listed item is completed	PINE SPRINGS FED 12-23-14S-22E	23	140S	220E	4304734676	13616	Federal	GW	TA	_
ate after each listed item is completed										
ate after each listed item is completed			 		 		ļ			_
ate after each listed item is completed			 	-			}			_
ate after each listed item is completed			 	 	 					_
49-8-10) Sundry or legal documentation was received from the NEW operator on: 10/21/2004	Enter date after each listed item is completed 1. (R649-8-10) Sundry or legal documentation	l n was received t			-	on:	10/21/200			
			mmerc		=				10/21/	20
new company was checked on the Department of Commerce , Division of Corporations Database on: 10/21/2	4. Is the new operator registered in the State of	of Utah:		YES	_Business Numl	ber:	5 <u>738462-0</u>	<u>14</u> 3		
new company was checked on the Department of Commerce , Division of Corporations Database on: 10/21/2 the new operator registered in the State of Utah: YES Business Number: 5738462-0143		ed on:								

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7.	Federal and Indian Lease Wells: The BLM and or the BIA has or operator change for all wells listed on Federal or Indian leases on:	as approved th not yet	e merger, name change,
8.	Federal and Indian Units: The BLM or BIA has approved the successor of unit operator for wells	listed on:	
9.	Federal and Indian Communization Agreements ("CA") The BLM or BIA has approved the operator for all wells listed within a		
10	Underground Injection Control ("UIC") The Division for the enhanced/secondary recovery unit/project for the water disposal v		C Form 5, Transfer of Authority to Inject, N/A
D/	ATA ENTRY:		· · · · · · · · · · · · · · · · · · ·
1.	Changes entered in the Oil and Gas Database on:	10/28/2004	_
2.	Changes have been entered on the Monthly Operator Change Spread S	Sheet on:	10/28/2004
3.	Bond information entered in RBDMS on:	10/28/2004	_
4.	Fee/State wells attached to bond in RBDMS on:	10/28/2004	_
5.	Injection Projects to new operator in RBDMS on:	10/28/2004	_
6.	Receipt of Acceptance of Drilling Procedures for APD/New on:		***
FF	DERAL WELL(S) BOND VERIFICATION:		
1.	Federal well(s) covered by Bond Number:	104091293	_
IN	DIAN WELL(S) BOND VERIFICATION:		
1.	Indian well(s) covered by Bond Number:	n/a	-
FI	EE & STATE WELL(S) BOND VERIFICATION:		
	(R649-3-1) The NEW operator of any fee well(s) listed covered by Bond	l Number	104319462
	The FORMER operator has requested a release of liability from their bon The Division sent response by letter on:	id on: 10/28/2004	10/21/2004
L	EASE INTEREST OWNER NOTIFICATION:		***************************************
3.	(R649-2-10) The FORMER operator of the fee wells has been contacted of their responsibility to notify all interest owners of this change on:	11/1/2004	a letter from the Division
CC	DMMENTS:		
_			

EVERGREEN OPERATING, INC. DAILY DRILLING REPORT

RIG CONTACT IN	FORMATION:
OFFICE TRAILER / FAX:	970 942 7543
CONSULTANT HAND CELL:	303 913 1054
OOGHOUSE:	307 268 7316

DATE SPUD DATE	SAM DEPTH
8/17/2004 8/16/2004	476
REPORT NO.	24 HR FOOTAGE
1	
DRLG CONTRACTOR	DAYS SINCE SPUD
Elenburg, Rig 12	1
CONSULTANT	AFE# API#
John C. Lamb	43-007-30718

	LIBONOL OG	Y OF DAIL	Y OPERATIONS (06:00 - 06:00 HRS)	SLOW	PUMP RA	TE DATA:		STRIN	G WEIGHT INF	ORMATION:
ROM (hrs)	TO (hrs)	HOURS (hrs)	Activity:	Depth	SPM	Pressure	Eff BHA Wt	Rotating:	Slackoff:	Hoisting:
09:00	15:00	6.00	MIRU							
15:00	21:30	6.50	Nipple up BOPE, weld flowline & drilling nipple, mix	mud						
21:30	23:00	1.50	Test BOPE and casing				· ·			
23:00	01:00	2.00	Finish NU							
01:00	04:00	3.50	Pick up BHA, tagged cement at 439'			_				
04:00	04:30	0.50	Displace water to pit							
04:30	06:00	1.50	Drilling cement and float (float depth 465) equipmer	t, drill cement to	476					
									REC	DEIVED 1 3 2004
									DEC	1 3 2004
								0	IV. OF OIL	GAS & MINING
TOTAL	LHOURS	21.50								

SUMMARY C	DAILY	CUM
		6.1
DESC.	(hrs)	(hrs)
Drill		ļ
Trip		
Circulate		
Rig Repair		<u> </u>
Rig Service		
Dev Survey		
NU / ND		
Cement		ļ
Run Casing		
woc		
OH Logging		
Mix Mud		
MI & RU		
RatHole		
Mouse Hole		
Fishing		
DST		
Coring		
Inspect BHA		
Cut drig line		
Wash & Ream		
Drill Cement		
TestBOPE		
woo		
PU/LD BHA		
Other		
TOTALS	0.00	0.00

			DAILY		CUM	AFE
COST CODE	DESCRIPTION OF DAILY COSTS		(\$)		(\$)	(\$)
2030.010	Land, Legal, Title, Survey, Arch, Damages, Permits, Signs					
2030.031	Dirtwork, Road, Location, Pits, Liner			<u> </u>		
2030.019	Contract Drilling 9480 / day 392.5 / h cond 5071 26,000 mob sfc 36791	\$	77,342		77,342	
2032.001	Water	\$_	945	\$	945	
2032.013	Drill Bits, Stabilizers, Reamers	\$_	12,000	\$	12,000	
2031.046	Cementing and Services	\$	5,000	\$	5,000	
2030.053	Coring and Analysis					
2030.052	Logging			L		
2030.054	Mud Logging			L		
2030.037	Rental Equipment	\$	1,640		1,640	
2030.028	Transportation	\$	7,200	\$	7,200	
2032.004	Mud and Chemicals	\$	1,508	\$	1,508	
	Directional Services, Mud Motors					
	Intermediate casing			ļ		
2030.035	Contract Labor	\$	1,800	\$_	1,800	
2030.022	Engineering / Supervision	\$	800	\$	800	
2030.099	Intangible Miscellaneous and Contingencies			<u> </u>		
2040.001	Surface Casing	\$	17,790	\$	17,790	
2040.004	Production Casing			<u> </u>		
1011.000	Float Equipment, Shoes, Centralizers			↓		
1041.000	Wellhead Equipment	\$	4,941	\$	4,941	
1073.000	Bottom Hole Pump / Gas Lift / Other			<u> </u>		
1104.000	Drivehead, Engine / Motor and Hydraulic Pump / Electric Unit	-		↓ _		
2040.052 / 2040.055	Valves and Fittings, Small / Large	<u> </u>				
2040.067	Other Surface Equipment			_		
2040.099	Tangible Miscellaneous and Contingencies			<u> </u>		
	TOTAL COSTS	\$	130,966	\$	130,966	s

Report#	1	Date:	08/17/04	-	DA	ILY DR			RT			_			Page 2
			Well Na	me:			nsen 1-18								<u> </u>
			<u> </u>					RECOR		r	T		BIT	T	
BUT	BIT			1		DEPTH	DEPTH	FOOTAGE	CUM BIT HOURS	ROP	WOB	RPM	TORQUE	•	IT GRADING
NO.	SIZE	1		SERIAL	JETS (32/32/32)	IN (B)	OUT (B)	DRILLED (A)	HOURS (hrs)	(f/hr)	WOB (Fe)	MTR/TBL	(ft -1be)	In Out Dull Loc	Seals Gge Dull Oth
<u> </u>	(In)	MFG	XL18N	NO.	(32/32/32) 14 / 14 / 14 / 16	(8)	(A)	0	VO#)	#DIV/0!	X-7				
1 +	12 1/4	Security	XLIBN		14 / 14 / 14 / 16			0		#DIV/0!					
		 	+	1			-	0		#DIV/0!					
		 	+	+				0		#DIV/0!			ļ		
			+	1				0		#DIV/0!					
+								0		#DIV/0!	ļ				
								0		#DIV/0!					
сомме	IENTS														
RENT/	AL EQUIP	MENT T		T			154			CASING	DATA	1.00			
RENTAL	DAILY	CUM						1.15	EXTERNAL	INTERNAL		19.	TOP	BOTTOM	
ITEM	COSTS	COSTS		SIZE	WEIGHT	GRADE	CONN	DRIPTID	COLLAPSE	YNELD	CAPACITY	LENGTH	SET AT	SET AT	1 1
	(\$)	(\$)			1 1				(psi)	(psi)	(bbls/ft)	(ft).	(ft)	(A KB)	
Living Qtrs	\$ 315	\$ 315		30"	NA	NA					ļ	40.00	0.00	40.00	
	\$ 45	\$ 45		13 3/8*	54.5	J55	ST&C	12.459	1,130	2,730	0.15450	500.00	2.00	498.00	
duft	\$ 60	\$ 60									ļ		 		
	\$ 20									L	L		.		
	\$ 50		T. S. C. 188				7.75	B	эттомно	LE ASSE	MBLY	1.55	-4.		111111111
	\$ 375		2000 <u>2000 2000 2000</u>				- 100		O I POWIFIC	MAXIMUM	MINIMUM		Γ.	· · · · ·	1 31 8
	\$ 60					55	146.0	T-400	AD SIZE	0.D.	.a.i	LENGTH		HRS SINCE	Alle Alle
	\$ 90	\$ 90		SCRIPTION OF		PROV	anes.	вох	PIN	(In)	(In)	(A)	HOURS RUN	INSPECTION	
	\$ 375	\$ 375	DE		ВНА	Sec		BOX	6 5/8R	12.250	1	1.00			
ill collars	\$ 250	\$ 250	 	bit (O (box x bo	(x)		ico	6 5/8R	6 5/8R						
	\$ 250	- 230	ļ —	Shock sub			/Spidle	6 5/8R	6 5/8R				L	L	
ner .				XO			co	6 5/8 H90	6 5/8R		I'''_				
ner .			7 -	7 3/8 Drill co	llars	Gr		6 5/8 H90	6 5/8 H90						
ner				XO			co	4 1/2 XH	6 5/8 H90					ļ	
her .		\vdash	5 -	6 1/2° Drill C	ollars	п		4 1/2 XH	4 1/2 XH	6.500	2.250		55.00	55.00	
her				6 1/2" Drill c				4 1/2 XH	4 1/2 XH	6.500	2.250	340.02	97.50	97.50	ļ
her				- 4 1/2" HW		r	g	4 1/2 XH	4 1/2 XH	4.500	2.875	155.33	97.50	97.50	
	\$ 1,640	\$ 1,640									L	496.35	<u> </u>		L
							DRILLIN	G MUD R	EPORT	20.57			77.0389	7 (404.	
SAMPLE	315275 J. 1 - 27 1367 J. 1 - 37	MUD	FUNNEL.	1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	GEL	FILTRATE	o	CAKE	4.62	SAND			The second	
DEPTH	TIME	WT.	VISCOSITY	PV/YP	ка	STRENGTH	API	CALCIUM	THICKNESS	SOUDS	CONTENT	рН	CHLORIDES	ALKALINITY	LCM
(R)	(hh:mm)	(PPG)	(sec/qt)		(%)	(Ib/100 ft2)	(ml/30 min)	(ppm)	(/32 ln)	(% vol)	(% vol)	1 14 .	(ppm)	PF/MF	lb/gal
440	05:00	8.60	33	5/9	2.80	3/6	24.0	20	2	1.0		10.0	13,000	1.34 / 2.4	-
		<u> </u>									 -				
		<u> </u>		<u> </u>							l				
rija ir			e 1. 114 194 1946 ac		151 8155 . 19	DA	ILY MUD	COST & I	NVENTOR	Υ	4 s. 15 15 77 5		Title Age		
	W. S	Carl I		[]	1900000										TOTAL
			BARITE	QLICK GEL	CAUSTIC	LIME	SODA ASH	UNIDRILL	SOLKWICK	PACR	PHPA	CEDAR	TRUCKING		costs
		<u> </u>	(sx)	(ex)	(#X)	(ex)	(sx)	(s×)	(sx)	(\$X)	(gat)	(#X.)	(5)		
NIT COST				 								<u> </u>			
TARTING INVE			120	 						 					
NVENTORY REC															
ISED LAST 24 H															
AILY MUD COS															
REVIOUS CUMIL		T													
UMULATIVE ML													<u> </u>	<u> </u>	L
.46.66		11,000			0.8603		MUDLO	GGER RI	EPORT	Park.	100000000		797.480	M. Da v	
MILID G	GAS DATA (In L	loits)	SHOW INTE	RVAL	RATE	OF PENETRATI			SHOW GAS DA	TA	L				
BACK	CONN	TRIP	FROM	то	BEFORE	DURING	AFTER	BEFORE	DURING	AFTER	Formation 1	ops:			
GROUND	GAS	GAS	(P)	(ft)	(ft)	(k)	(R)	UNITS	UNITS	LINITS					
		L		1 —							Sample per				
		l									Sample Desci	ipuon.			
											·····				
			ga. eggana		1. 486.8		DEVIAT	ION SUE	RVEYS						
5						A	DEVIAT	2000000		Autoat	Ini Angle	Dane		Awlengesh	DI Avela
Depth	Deviation	Azimuth	DL Angle	Depth	Deviation	Azimuth	DEVIAT	2000000		Azimuth	DL Angle	Depth	Deviation	Azimuth	DL Angle
Depth	Deviation	Azimuth	DL Angle	Depth	Deviation	Azimuţh	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2000000		Azimuth	DL Angle	Depth		Azimuth	DL Angle
Depth	Deviation	Azimuth	DL Angle	Depth	Deviation	Azimuth	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2000000		Azimuth	DL Angle	Depth		Azimuth	DL Angle
Depth	Deviation	Azimuth	DL Angle	Depth	Deviation	Azimuth	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2000000		Azimuth	DL Angle	Depth		Azimuth	DL Angle
Depth	Deviation	Azimuth	DL Angle	Depth	Deviation	Azimuth	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2000000		Azimuth	DL Angle	Depth		Azimuth	DL Angle
Depth	Davistion	Azimuth	DL Angle	Depth	Deviation	Azimuth	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2000000		Azimuth	DL Angle	Depth		Azimuth	DL Angle
Depth	Davistion	Azimuth	DL Angle	Depth	Deviation	Azimuth	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2000000		Azimuth	DL Anglo	Depth		Azimuth	DL Angle
Dapth	Deviation	Azimuth	DL Angle	Depth	Deviation	Azimuth	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2000000		Azimuth	DL Angle	Depth		Azimuth	DL Angle
Dapth	Deviation	Azimuth	DL Angle	Depth	Deviation	Azimuth	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2000000		Azimuth	DL Angle	Depth		Azimuth	DL Angle
Depth	Deviation	Azimuth	DL Angle	Depth	Deviation	Azimuth	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2000000		Azimuth	Di. Angle	Depth		Azimuth	DL Angle
Dapth	Deviation	Azimuth	DL Angle	Depth	Deviation	Azimuth	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2000000		Azimuth	DL Angle	Depth		Azimuth	DL Angle
Depth	Deviation	Azimuth	DL Angle	Depth	Deviation	Azimuth	1 100000	2000000		Asimuth	Di. Angle	Depth		Azimuth	DL Angle
Dapth	Deviation	Azimuth	DL Angle	Dopth	Deviation	Azimuth	1 100000	2000000		Azimuth	DL Angle	Depth		Azimuth	DL Angle
Dapth	Deviation	Azimuth	DL Angle	Depth	Deviation	Azimuth	1 100000	2000000		Azimuth	DL Angle	Depth		Azimuth	DL Angle
Depth	Deviation	Azimuth	DL Angle	Depth	Deviation	Asimuth	1 100000	2000000		Azimuth	DL Angle	Depth		Azimuth	DL Angle
Depth	Deviation	Azimuth	DL Angle	Depth	Deviation	Asimuth	1 100000	2000000		Azimuth	DL Angle	Depth		Azimuth	DL Angle
Dapth	Deviation	Asimuth	DL Angle	Depth	Deviation	Asimuth	1 100000	2000000		Azimuth	DL Angle	Depth		Azimuth	DL Angle
Dapth	Deviation	Azimuth	DL Angle	Depth	Deviation	Asimuth	1 100000	2000000		Asimuth	DL Angle	Depth		Azimuth	DL Angle
Dapth	Deviation	Azimuth	DL Angle	Depth	Deviation	Azimuth	1 100000	2000000		Azimuth	DL Angle	Depth		Azimuth	DL Angle
Dapth	Deviation	Azimuth	DL Angle	Depth	Deviation	Asimuth	1 100000	2000000		Azimuth	DL Angle	Depth		Azimuth	DL Angle
Depth	Deviation	Asimuth	DL Angle	Depth	Deviation	Astmuth	1 100000	2000000		Azimuth	DL Angle	Depth		Azimuth	DL Angle
Depth	Deviation	Azimuth	DL Angle	Depth	Deviation	Azimuth	1 100000	2000000		Azimuth	DL Angle	Depth		Azimuth	DL Angle
Dapth	Deviation	Azimuth	DL Angle	Depth	Deviation	Asimuth	1 100000	2000000		Azimuth	DL Angle	Depth		Azimuth	DL Angle
Dapth	Deviation	Azimuth	DL Angle	Depth	Deviation	Asimuth	1 100000	2000000		Azimuth	DL Angle	Depth		Azimuth	DL Angle
Depth	Deviation	Azimuth	DL Angle	Depth	Deviation	Asimuth	1 100000	2000000		Azimuth	DL Angle	Depth		Azimuth	DL Angle
			DL Angle	Depth	Deviation	Asimuth	1 100000	2000000		Azimuth	DLAngle	Depth		Azimuth	DL Angle
ESTIMAYE	ED FORMATION	N TOPS:	DL Angle	Depth	Deviation	Asimuth	1 100000	2000000		Azimuth	DL Angle	Depth		Azimuth	DL Angle
ESTIMAYE		N TOPS:	DL Angle	Depth	Deviation	Asimuth	1 100000	2000000		Azimuth	DL Angle	Depth		Azimuth	DL Angle
ESTIMAYE	ED FORMATION	N TOPS:	DL Angle	Depth	Deviation		Dt Angle	Depth			DL Angle	Depth		Azimuth	DL Angle
ESTIMAYE	ED FORMATION	N TOPS:	DL Angle LINER	Depth	Deviation		Dt Angle	Depth	Deviation		DL Angle			Azimuth	
ESTIMAYE	ED FORMATION	N TOPS:				PI	DL Angle	Depth	Deviation						
ESTIMATE SAMPL MUD PUMPS	ED FORMATION PLE DESCRIPTI	N TOPS: GN: MODEL	LINER SIZE (In)	STROKE LENOTH (in)	ASSUMED EFF (%)	PLMP RATE (ppn)	DL Angle DL Angle On the second sec	RCULATI PUMP LOUGH (District)	Deviation NG DATA (galimin)	CR0 Standplpe (psl)	ZUATING DETA	ILS i+P (34 in)	Deviation	ANNLAR VE DC ((Vmin)	LOCITY DC (Krain)
ESTMATE SAMP. MUD PUMPS D. 1	ED FORMATION FLE DESCRIPTI	N TOPS:	LINER	STROKE	ASSUMED EFF	PUMP	DL Angle	RCULAT PLANT LUME TO LONG TO L	Deviation Deviation	QR(: Standpipe	SALATING DETA Meter	LS	Deviation	ANNLAR VE DC	LOGITY
ESTIMATE SAMPA MUD PUMPS	ED FORMATION PLE DESCRIPTI	N TOPS: GN: MODEL	LINER SIZE (In)	STROKE LENOTH (in)	ASSUMED EFF (%)	PLMP RATE (ppn)	DL Angle DL Angle On the second sec	RCULATI PUMP LOUGH (District)	Deviation NG DATA (galimin)	CR0 Standplpe (psl)	SALATING DETA Meter	ILS i+P (34 in)	Deviation	ANNLAR VE DC ((Vmin)	LOCITY DC (Krnin)

EVERGREEN OPERATING, INC. DAILY DRILLING REPORT

RIG CONTACT INFORMATION:							
OFFICE TRAILER / FAX:	970 942 7543						
CONSULTANT HAND CELL:	303 913 1054						
DOGHOUSE:	307 268 7316						
PUSHER:							

DATE SPUD DATE	6AM DEPTH
8/18/2004 8/16/2004	601
REPORT NO.	24 HR FOOTAGE
2	125
DRLG CONTRACTOR	DAYS SINCE SPUD
Elenburg, Rig 12	2
CONSULTANT	AFE# API#
John C. Lamb	43-007-30718

ACTIVITY AT REPORT TIME:

Drilling ahead

DAILY COST

\$ 32,558 \$ 160,861 \$ -

(hrs) 06:00 06:30 08:45 10:00 14:00 15:15 16:15	TO (hrs) 06:30 08:45 10:00 14:00 15:15 16:15 16:30 17:30	HOURS (hrs) 0.50 2.25 1.25 4.00 1.25 1.00 0.25	Activity: Drilling cement - encountered high rotary torque - unal shaker - possible backed off float joint or large pieces Trip out to check bit, found 3 large chunks sintered me Trip in hole Work bit on bottom - unable to drill - high rotary torque Trip out of hole - found 4 more large chunks of sintere- Trip in hole	of junk on bo etal lodged in - large amou	ttom bit - detern			netal shaving		Hoisting:
06:30 06:30 08:45 10:00 14:00 15:15 16:15	06:30 08:45 10:00 14:00 15:15 16:15	0.50 2.25 1.25 4.00 1.25 1.00	shaker - possible backed off float joint or large pieces. Trip out to check bit, found 3 large chunks sintered me Trip in hole Work bit on bottom - unable to drill - high rotary torque Trip out of hole - found 4 more large chunks of sinteres Trip in hole	of junk on bo etal lodged in - large amou	ttom bit - detern					ing cuttings across
06:30 08:45 10:00 14:00 15:15 16:15	08:45 10:00 14:00 15:15 16:15 16:30	2.25 1.25 4.00 1.25 1.00	shaker - possible backed off float joint or large pieces. Trip out to check bit, found 3 large chunks sintered me Trip in hole Work bit on bottom - unable to drill - high rotary torque Trip out of hole - found 4 more large chunks of sinteres Trip in hole	of junk on bo etal lodged in - large amou	ttom bit - detern					
08:45 10:00 14:00 15:15 16:15	10:00 14:00 15:15 16:15 16:30	1.25 4.00 1.25 1.00	Trip out to check bit, found 3 large chunks sintered me Trip in hole Work bit on bottom - unable to drill - high rotary torque Trip out of hole - found 4 more large chunks of sintered Trip in hole	tal lodged in	bit - detern	nined junk to b	e insert float de	bris called o	aut fishing tools	
08:45 10:00 14:00 15:15 16:15	10:00 14:00 15:15 16:15 16:30	1.25 4.00 1.25 1.00	Trip in hole Work bit on bottom - unable to drill - high rotary torque Trip out of hole - found 4 more large chunks of sinterer Trip in hole	- large amou				, , , , , , , , , ,	ac issuing tools	
10:00 14:00 15:15 16:15	15:15 16:15 16:30	1.25 1.00	Trip out of hole - found 4 more large chunks of sintered	- large amou d metal lodge	int metal of					
14:00 15:15 16:15	16:15 16:30	1.00	Trip out of hole - found 4 more large chunks of sintered	d metal lodge	JIIL IIIEIAI SI	navings across	shaker, swee	hole, contin	ue to work bit or	n junk - anilea 2
16:15	16:30		Trip in hole		ed in bit		-11			
		0.25								
46.20	17:30		Work bit on bottom - high rotary torque - large amount	metal shavir	ngs across	shaker, drilled	5'			
10.30		1.00	Trip out of hole - found 4 large and 1 small chunks of s	sintered meta	I lodged in	bit				
17:30	18:30	1.00	Trip in hole							
18:30	20:15	1.75	Work bit on bottom, starting to drill with less junk on bo	ottom, drill ce	ment, shoe	and open hole	e to 540			
20:15	20:30	0.25	Service rig & repair flowline						-	
20:30	21:30	1.00	Drill 540 - 560							
21:30	23:00	1.50	Trip out of hole							
23:00	02:00	3.00	PU MWD BHA assembly							
02:00	03:30	1.50	Trip in hole							
03:30	06:00	2.50	Drill 560 - 601							
							<u></u> .			
									DECE	111/5
									RECE	HVELJ
		-							DEC 1	3 2004
								Ca A.	OF OIL 0	AS & MINING
TOTAL H		24.00		-			 -			

	DAILY	CUM
ESC.	(krs)	(krs)
Drill	5.25	5.25
Trip	10.75	10.75
Circulate		
Rig Repair		
Rig Service	0.25	0.25
Dev Survey		
NU/ND		
Cement		
Run Casing		
woc		
OH Logging		
Mix Mud		
MI & RU		
Rat Hole		
Mouse Hole		
Fishing		
DST		
Coring		
Inspect BHA		
Cut drig line		
Wash & Ream		
Drill Cement	4.75	4.75
TestBOPE		
woo		
PU/LD BHA	3.00	3.00
Other		
TOTALS	24.00	24.00

	SUMMARY OF DAILY & CUMULATIVE	7.7	DAILY		CUM		AFE	
COST CODE	DESCRIPTION OF DAILY COSTS		(\$)		(\$)	<u>. V.</u>	(\$)	
2030.010	Land, Legal, Title, Survey, Arch, Damages, Permits, Signs			1				
2030.031	Dirtwork, Road, Location, Pits, Liner	_		<u> </u>				
2030.019	Contract Drilling 9480 / day 392.5 / h cond 5071 26,000 mob sfc 36791	\$	9,480	\$	86,822			
2032.001	Water	\$	945	\$	945			
2032.013	Drill Bits, Stabilizers, Reamers			\$	12,000			
2031.046	Cementing and Services			\$_	5,000			
2030.053	Coring and Analysis			ļ				
2030.052	Logging			<u> </u>				
2030.054	Mud Logging			Ļ				
2030.037	Rental Equipment	\$	3,930	\$	5,360			
2030.028	Transportation	\$	450	\$	7,650			
2032.004	Mud and Chemicals	\$	1,508	\$	1,508			
	Directional Services, Mud Motors 2 day cum	\$	14,325	\$	14,325			
	Intermediate casing			<u> </u>				
2030.035	Contract Labor	\$	1,120	\$	2,920			
2030.022	Engineering / Supervision	\$	800	\$	1,600			
2030.099	Intangible Miscellaneous and Contingencies			_				
2040.001	Surface Casing			\$	17,790			
2040.004	Production Casing		,,,,	_				
1011.000	Float Equipment, Shoes, Centralizers	\rightarrow		1_				
1041.000	Wellhead Equipment			\$	4,941			
1073.000	Bottom Hole Pump / Gas Lift / Other			↓				
1104.000	Drivehead, Engine / Motor and Hydraulic Pump / Electric Unit			<u> </u>				
2040.052 / 2040.055	Valves and Fittings, Small / Large			1				
2040.067	Other Surface Equipment			1_				
2040.099	Tangible Miscellaneous and Contingencies							
	TOTAL COSTS	5	32,558	S	160,861	\$		

	2	Date:	08/18/04 Well Na	 ,	DA		LLING	REPUR	(1			_			
			AA AHI Mai		7,500			RECORE)						
	BIT		1 11 2 1 10	1		DEPTH	DEFTH	FOOTAGE	CUM BIT				BIT	вт	GRADING
BIT	SIZE			SERIAL	JETS	iN	ουτ	DRILLED	HOURS	ROP	WOB	RPM	TORQUE		
NO.		MFG	TYPE	NO.	(32/32/32)	(R)	(N)	(8)	(hrs)	(NN)	(#°=)	MTR/TBL	(R - Iba)	In Out Dull Loc S	eals Gge Dull O
(5)	(In) 12 1/4	Security	XL18N		4 / 14 / 14 / 16	494	602	108	3.00	36.0	20 - 23	45 / 60	1200 - 1800		·
1 +	12 1/4	Jecunty	7.2.013					0		#DTV/0!	<u> </u>				
+			+					0		#DIV/0!					
				1 1				0		#DIV/0!	I				
			+					0		#DIV/0!					
-+			 	 				0	1	#DIV/0!					
\dashv			1					0		#DIV/0!					
СОММЕ	ENTS									CASING D	ATA				
RENTA	AL EQUIP	MENT						1	EXTERNAL	INTERNAL	AIA		TOP	BOTTOM	
TEM	DAILY			5IZE	WEIGHT.	GRADE	CONN	DRIPTID	COLLAPSE	YIELD	CAPACITY	LENGTH	SETAT	SET AT	
IEM	COSTS	COSTS		"-		****		超点 6編	(psl)	(psi)	(bbls/ft)	(k)	(ft)	(R KB)	
	(\$)	\$ 630		30"	NA	NA			-			40.00	0.00	40.00	
		\$ 90		13 3/8*	54.5	J55	ST&C	12.459	1,130	2,730	0.15450	500.00	2.00	498.00	
		\$ 120		13 3/0	04.0										
		\$ 100							TTONUO	LE ASSEN	ADI V			Ta 1	
	\$ 375	\$ 750		- 400°		<u> </u>	<u>?</u>	ВС		MAXIMUM	MINIMUM				
		\$ 200	Late 12					THREA	20.00	0.0	I.D.	LENGTH	aline i	HRS SINCE	
Aller	\$ 90	\$ 180				PROV		вох	PIN	(In)	(in)	(R)	HOURS RUN	INSPECTION	5.2
ad clinr		\$ 375	DES	CRIPTION OF	ВНА			BUX	6 5/8R	12.250	- Vivi	1.00			
		\$ 2,625		bit	,	Sec		6 5/8R	6 5/8R		1				
Sub	\$ 250	\$ 250	 	(O (box x bo	×)	Griffith		6 5/8R	6 5/8R						
				Shock sub		Griffith		6 5/8 H90	6 5/8R						
				XO		Gr: Gr:		6 5/8 H90	6 5/8 H90						
$-\bot$			7-	7 3/8 Drill co	nars			4 1/2 XH	6 5/8 H90						
				XO		Gr		4 1/2 XH 4 1/2 XH	4 1/2 XH	6.500	2.250		55.00	55.00	
				3 1/2" Drill C		ri		4 1/2 XH 4 1/2 XH	4 1/2 XH 4 1/2 XH	6.500	2.250	340.02	97.50	97.50	
				6 1/2" Drill c		ri		4 1/2 XH	4 1/2 XH	4.500	2.875	155.33	97.50	97.50	
		\$ 5.360	2	- 4 1/2" HWI	٠,٠	r	¥	4 1/2 XH	7 1/2 AT	7.500	2,0,0	496.35			
TALS	\$ 3,930	\$ 5,360									. 1500	11111111111		1. 198 b. 11.	1754
			Rangillo .		<u> </u>	15/2		G MUD R	CAKE	oga <u>je k</u> Salović	SAND	Tables 1			
MPLE		MUD	FUNNEL		V~	GEL STRENGTH	FILTRATE API	CALCIUM	THICKNESS	50LID6	CONTENT	ρΗ	CHLORIDES	ALKALINITY	LCM
EPTH	TIME	WT.	VISCOSITY (sec(al)	PV/YP	KCL (%)	(Ib/100 R2)	(ml/30 min)	(ppm)	(/3Z in)	[% vel]	(% vol)		(ppm)	Pf/Mf	ib/gat
(R)	(hh:mm) 05:00	8.60	(sec/qt) 33	5/9	2.80	3/6	24.0	20	2	1.0		10.0	13,000	1.34 / 2.4	
440	UU.GU	3.00												ļ <u> </u>	
											<u></u>				
	No view			, ,		DA	ILY MUD	COST & I	VENTOR	Υ	1				TOTAL
			BAPUTE	QUICK GEL	CAUSTIC	LIME	SODA ASH	UNIDRILL	SOLKWICK	PACR	PHPA	CEDAR	TRUCKING		costs
a dig	14861-4		(sx)	(ex.)	(ex.)	(6×)	(\$×)	(ex.)	(*×)	(#X)	(gal)	(ex)	(5)		
COST				1											
TING INVE			120	\vdash		-	<u> </u>				 				
NTORY REC				1											
LAST 24 F				+											
NG INVENT				+											
Y MUD COS	ST MULATIVE COST			+		<u> </u>									
LATIVE M						I							L		
7.384		G. Luke						GGER RI		e 173,44					7 B. 188
	GAS DATA (In L	Inits)	SHOW INTE	RVAL 10	RATE BEFORE	OF PENETRATI	AFTER	BEFORE	SHOW GAS DA DURING	AFTER	Formation 1	ops:			
ROUND	GAS	GAS	(fl)	(N)	(ft)	(R)	(rk)	UNITS	UNITS	UNITS					
											Sample per				
!				 							Sample Desc	приоп.			
		1 1				L									
									arranda a a		0 7 1 V	dudur Histori		ali are industrial and a	
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ESTMAT	Deviation TED FORMATION FILE DESCRIPT	N TOPS	DL Angle	Depth	Daviation	Azimuth			130000007 _	Azimuth	DLAngle	Depth	Deviation	Asimuth	DLAngle
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ESTIMAT SAMM	TED FORMATION PLE DESCRIPT	N TOPS.		STROKE	ASSUMED EFF	PUMP	UMP & C	Depth	Deviation Deviation	CIR Standpipe	COLATING CETA Motor	NLS H#P	CP CP	ANNLARVE	OCITY
ESTINAT SAME	TED FORMATIO IPLE DESCRIPT	N TOPS.	LINER SIZE (n)	STROKE LENGTH (in)	ASSUMED EFF (%)	P PAP RATE (spm)	UMP & C	Depth IRCULAT PUMP (Metericia)	Deviation Deviation	CR Standpipe (pd)	CLATING DETA	AILS H#P (Sq In)	CP (t/min)	ANNLAR VE. DC ((Vmin)	OCTY OC ((tmin)
ESTIMAT SAMI	TED FORMATION PLE DESCRIPT	N TOPS.	LINER	STROKE	ASSUMED EFF	PUMP	UMP & C	Depth	Deviation Deviation	CIR Standpipe	COLATING CETA Motor	NLS H#P	CP CP	ANNLARVE	OCITY
ESTIMATA SAMI	TED FORMATIO IPLE DESCRIPT	N TOPS.	LINER SIZE (n)	STROKE LENGTH (in)	ASSUMED EFF (%)	P PAP RATE (spm)	UMP & C	Depth IRCULAT PUMP (Metericia)	Deviation Deviation	CR Standpipe (pd)	COLATING CETA Motor	AILS H#P (Sq In)	CP (t/min)	ANNLAR VE. DC ((Vmin)	OCTY OC ((tmin)

E. RGREEN OPERATING, INC. DAILY DRILLING REPORT

DIO CONTACT IN	EODMATION:
RIG CONTACT IN	FURMATION:
OFFICE TRAILER / FAX:	970 942 7543
CONSULTANT HAND CELL:	303 913 1054
DOGHOUSE:	307 268 7316
PUSHER:	

DATE SPUD DATE	6AM DEPTH
8/19/2004 8/16/2004	869
REPORT NO.	24 HR FOOTAGE
3	268
DRLG CONTRACTOR	DAYS SINCE SPUD
Elenburg, Rig 12	3
CONSULTANT	AFE # API #
John C. Lamb	43-007-30718

ACTIVITY AT REPORT TIME:

Picking up new mud motor to trip back in hole

DAILY COST

\$ 19,302 \$ 180,162 \$ -

CF	CHRONOLOGY OF DAILY OPERATIONS (06		Y OPERATIONS (06:00 - 06:00 HRS)	SLOW	PUMP RA	ATE DATA:		STRIN	G WEIGHT INFO	DRMATION:
ROM	то	HOURS		Depth	SPM	Pressure	Eff BHA Wt	Rotating:	Slackoff:	Hoisting:
	(hrs)	(hrs)	Activity:	779	54	2000	43,000	74,000	72,000	76,000
(hrs) 06:00	10:30	4.50	Rotate 601 - 686			•				
10:30	11:30	1.00	Slide 686 - 701							
11:30	16:15	4.75	Rotate 701 - 796							
16:15	18:00	1.75	Rig repair - drawworks motor starving for fuel							
18:00	18:30	0.50	Rig service							
18:00	22:00	3.50	Rotate 796 - 869							
16.30	22.00	3.50	At 869 we suddenly lost 375- 400 lbs pump pressure in	stantaneous	ly - previo	us pump press	sure had been ?	750		
22:00	23:00	1.00	Go through pump valve assemblies, found & reinstalled	loose valve	guide - ga	ained 30 psi ba	ick			
23:00	00:00	1.00	Go through pump again, did not find subsequent issue,	put back on	bottom ha	ad 350 psi at 1	18 SPM			
00:00	04:00	4.00	Trip out of hole, found no holes or obvious issues with t	pipe or BHA						
04:00	05:30	1.50	LD Mud motor, pick up bit & circulate through bit, remov	ve suction ho	se to pun	np, checked ch	arger pump &	eliminated all	possible mechar	nical issues
04.00	00.50	1.00	with surface circulating equipment							
05:30	06:00	0.50	LD Shock sub, PU new shock sub, mud motor							
05.50	00.00	0.00						-		
-	-									
***									COLL	per pro-
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	<u> </u>									
	1							D	EC 132	AAA — — — — — — — — — — — — — — — — — —
									<u> </u>	TUT
								DIV OF	OIL GAS 8	AMAHAR
									on an any start	· maratra O
TOTAL	HOURS	24.00								

SUMMARY OF RIG HOURS								
	DAILY	CUM						
DESC.	(hrs)	(hrs)						
Drill	13.75	19.00						
Trip	4.00	14.75						
Circulate		0.50						
Rig Repair	1.75	1.75						
Rig Service	0.50	0.75						
Dev Survey								
NU / ND		8.50						
Cement								
Run Casing								
woc								
OH Logging								
Mix Mud								
MI & RU		6.00						
RatHole								
Mouse Hole								
Fishing								
DST								
Coring								
Inspect BHA								
Cut drig line								
Wash & Ream								
Drill Cement		6.25						
Test BOPE		1.50						
woo								
PU/LD BHA	0.50	7.00						
insp circ equip	3.50	3.50						
TOTALS	24.00	69.50						

COST CODE	DESCRIPTION OF DAILY COSTS		DAILY (\$)		CUM (\$)	AFE (\$)
2030.010	Land, Legal, Title, Survey, Arch, Damages, Permits, Signs					
2030.031	Dirtwork, Road, Location, Pits, Liner					
2030.019	Contract Drilling 9480 / day 392.5 / h cond 5071 26,000 mob sfc 36791	\$	9,480		96,302	
2032.001	Water			\$_	945	
2032.013	Drill Bits, Stabilizers, Reamers			\$	12,000	
2031.046	Cementing and Services	_		\$	5,000	
2030.053	Coring and Analysis	1				
2030.052	Logging			<u> </u>		
2030.054	Mud Logging			<u> </u>		
2030.037	Rental Equipment	\$	1,501		6,861	
2030.028	Transportation	\$	300	_	7,950	ļ. <u> </u>
2032.004	Mud and Chemicals	\$	1,040	\$	2,547	
	Directional Services, Mud Motors	\$	6,181	\$	20,506	
	Intermediate casing			<u> </u>		
2030.035	Contract Labor			\$	2,920	
2030.022	Engineering / Supervision	\$	800	\$	2,400	
2030.099	Intangible Miscellaneous and Contingencies					
2040.001	Surface Casing			\$	17,790	
2040.004	Production Casing					
1011.000	Float Equipment, Shoes, Centralizers					
1041.000	Wellhead Equipment	<u> </u>		\$	4,941	
1073.000	Bottom Hole Pump / Gas Lift / Other	<u> </u>				
1104.000	Drivehead, Engine / Motor and Hydraulic Pump / Electric Unit			<u> </u>		
2040.052 / 2040.055	Valves and Fittings, Small / Large					
2040.067	Other Surface Equipment					
2040.099	Tangible Miscellaneous and Contingencies					
	TOTAL COSTS	s	19,302	S	180,162	S

eport#	3	Date:	08/19/04		DA	ILY DR	ILLING nsen 1-18	KEPOI	RT			_			Page 2
			Well Na	тю:	7.	Je		F RECOR	D				A. 51 g		
BIT	817	1	T	1		DEPTH	DEPTH	FOOTAGE	CUM BIT				ext .	e e	T GRADING
NO.	SIZE		- 1	SERIAL	JETS	in	out	DRILLED	HOURS	ROP	wos	RPM	TORQUE		and an bull off
(F)	(In)	MFG	TYPE	NO.	(32/32/32)	(R)	(R)	(ft)	(hrs)	(f/hr)	(#7=)	MTR/TBL 45 / 60	(ft - lbs) 1200 - 1800		Seals Gge Dull Oth
1.	12 1/4	Security	XL18N	754840	14 / 14 / 14 / 1	494	869	375 0	16.75	22.4 #DIV/0!	20 - 23	43760	1200 - 1000		
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	MENTS	MENIE I					<u> </u>			CASING E	DATA		11.900		
RENT	TAL EQUIP	CUM							EXTERNAL	INTERNAL			TOP	воттом	
ITEM	COSTS	COSTS		SIZE	WEIGHT	GRADE	CONIN	DRIPTID	COLLAPSE	YIELD	CAPACITY	LENGTH	SET AT	SET AT	
	(\$)	(5)					· · · · · · ·		(psi)	(psi)	(bbls/ft)	(k) 40.00	0.00	40.00	
Ming Qtrs	\$ 315	\$ 945		30" 13 3/8"	NA 54.5	NA J55	ST&C	12.459	1,130	2,730	0.15450	500.00	2.00	498.00	
ac Tank rklift	\$ 45 \$ 60			13 3/5	34.5	333	0.45								
rtajohn	\$ 20														
od Trailer	\$ 50	\$ 150							оттомно	LE ACCEA	4DLV		1,1,5555	- Lagra Tillin	
id Cleaner	\$ 375		1 2 2 2	4 150	(3) (1) (4) (4)	1000 M		<u>_</u>	OTTOMINO	MAXIMUM	MINIMUM				
R	\$ 100 \$ 90	\$ 300 \$ 270						THRE	AD SIZE	O.D.	I.D.	LENGTH		HRS SINCE	
todriller mud cinr	\$ _ 90	\$ 375	DES	CRIPTION OF	ВНА	PROV	/IDER	вох	PIN	(ln)	(in)	(ft)	HOURS RUN	INSPECTION	- A-1
ill collars	\$ 196			Bit		Sec	urity		6 5/8 R	12.250		1.25	-	 	
ock Sub	\$ 250	\$ 500	7/8 Lob	4 Stage M			DI	6 5/8 R	6 5/8 R	8.000	2 000	29.52 3.02	 		·
ner	ļ	├ —		Float Sub		S	DI idl●	6 5/8 R 6 5/8 R	6 5/8 R 6 5/8 R	8.000	3.000 2.688	11.99	 		
ner	 			onel Drill C			DI	6 5/8 R	6 5/8 R	8.000	3.250	30.58			
ner	 	 		Off Sub & C			DI	6 5/8R	6 5/8 R	7.750	3.750	8.94			
ier	1			хо			DI	6 5/8 H90	6 5/8 Ř	8.000	3.250	2.35	ļ	<u> </u>	
er			7 - 3	7 3/4" Drill C	ollars		ig	6 5/8 H90	6 5/8 H90	7.750	2.250	340.02		 	
ner	ļ			XO 6 1/2 Drill (College		DI	4 1/2 XH 4 1/2 XH	6 5/8 H90 4 1/2 XH	7.750 6.500	2.625 2.250	2.35 309.53	 		
TOTALS	\$ 1,501	\$ 6,861	10 -	6 1/2 Dnll (Collars	<u> </u>	ig	4 1/2 AH	4 1/2 An	0.300	2.230	309.55			
	411.13	(1734)				Taligners.		G MUD R			1				i de la companya de l
SAMPLE		MUD. WT.	FUNNES. VISCOSITY	PV/YP	ка	GEL STRENGTH	FILTRATE	CALCIUM	CAKE THICKNESS	soups	SAND	рН	CHLORIDES	ALKALINITY	LCM
DEPTH (A)	TIME (hh:mm)	(PPG)	(sec/qt)	""	(%)	(Ib/100 NZ)	(ml/30 min)	(ppm)	(/32 ln)	(% vol)	(% vol)	e alge 1947	(ppm)	Pf/Mf	(b/gal
440	05:00	8.60	33	5/9	2.80	3/6	24.0	20	2	1.0	<u> </u>	10.0	13,000	1.34 / 2.4	<u> </u>
				 							 				
	1	<u> </u>		100 mar 1 / 1 / 1 / 1 / 1 / 1 / 1 / 1 / 1 / 1	Harana II Ta	D.A.	II V MUID	COST & I	NVENTOR	v				Concession:	148.0 148.0 144.
						I DA	ILY MUD	COSTAT							TOTAL
			BARITE	QUICK GEL	CAUSTIC	LIME	SODA ASH	UNIDRILL	SOLKWICK	PAC-R (sx)	PHPA (gat)	CEDAR (sx)	TRUCKING (\$)		costs (\$)
NIT COST	Elleren	1000 000	(#X)	(sx)	(#×)	(e×)	(sx)	(ex)	(ex)	(20)	19-1				
TARTING INV	ENTORY		120				<u> </u>					<u> </u>			
WENTORY R	ECEIVED			<u> </u>		1	-		-		 				
SED LAST 24							 	 		-	1	 			
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REVIOUS CU	MULATIVE COS	т		Γ								1	 		-
UMULATIVE				<u></u>			<u> </u>		<u> </u>		<u> </u>	<u> </u>			J
	D GAS DATA (In	Lodes	SHOWINTE	RVAL	RATE	OF PENETRATI		OGGER R	EPORT SHOW GAS DA	TA			- 1989,085,4848888 		<u> </u>
BACK	CONN	TRIP	FROM	70	BEFORE	DURING	AFTER	BEFORE	DURING	AFTER	Formation '	Tops:			
GROUND	GA5	GAS	(4)	(A)	(A)	(R)	(%)	LINETS	UNITS	UNITS	Sample per	centages:			
		ļ. ————		 				 			Sample Desc				
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Depth	Deviation	Azimuth	Dt. Angle	Depth	Deviation	Azimuti				Azimuth	DL Angle	Depth	Deviation	Azimuth	DLAngte
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Depth	Deviation	Asimuth	DL Angle	Depth	Deviation	Azimuth				Azimuth	DLAngle	Dapth	Deviation	Azimuth	DUAngle
			DL Angle	Depth	Deviation	Azimuth				Azimuth	DLAngle	Dypth	Deviation	Azimuth	DL'Angle
ESTIMA	ATEO FORMATICA	n TOPS:	DL Angle	Depth	Deviation	Azimuth				Azimuth	DLAngle	Dayth	Deviation	Azimuth	DL Angle
ESTIMA		n TOPS:	DL Angle	Depth	Deviation		DL Angle	Depth	Deviation		DLAngle	Dypth	Deviation	Azimuth	DL'Angle
ESTIMA ESTIMA	ATEO FORMATICA	n TOPS:				P	DL Angle	Depth					Deviation		
ESTIMA	ATEO FORMATICA	IN TOPS:	DL Angle LINER SIZE	Depth Depth STROKE	ASSUMED		UMP & C	Depth	ING DATA	CIR Standpipe	CCUATING DET. Motor	MLS H#P	DP	ANNARYE	a.ogry pc
ESTIMA SAN	ATED FORMATIC MALE DESCRIP	IN TOPS:	LINER SIZE (In)	STROKE LENGTH (In)	ASSUMED EFF (%)	PUMP	UMP & C	IRCULAT PUMP LOBERTIC D LOBERTIC D	ING DATA	CIR Standpipe (pu)	COLATING DETA	All, S	DP (bmin)	ANNLAR VE DC ((bmin)	a.oaty pc (Kmin)
ESTIMA SAN PLUMPS O. 1	ATED FORMATICAL DESCRIP	IN TOPS:	LINER	STROKE	ASSUMED	P P PUMP RATE	UMP & C	Depth	ING DATA	CIR Standpipe	CCUATING DET. Motor	MLS H#P	DP	ANNARYE	a.ogry pc
ESTIMA SAN	ATED FORMATIC MALE DESCRIP	IN TOPS:	LINER SIZE (In)	STROKE LENGTH (In)	ASSUMED EFF (%)	PUMP	UMP & C	IRCULAT PUMP LOBERTIC D LOBERTIC D	ING DATA	CIR Standpipe (pu)	CCUATING DET. Motor	All, S	DP (bmin)	ANNLAR VE DC ((bmin)	a.oaty pc (Kmin)
ESTWA SAN MUO PLAIPS J. 1	ATED FORMATIC MAKE National	IN TOPS:	LINER SIZE (In)	STROKE LENGTH (In)	ASSUMED EFF (%)	PUMP	UMP & C	IRCULAT PUMP LOBERTIC D LOBERTIC D	ING DATA	CIR Standpipe (pu)	CCUATING DET. Motor	All, S	DP (bmin)	ANNLAR VE DC ((bmin)	a.oaty CC ((Wmin)

E._RGREEN OPERATING, INC. DAILY DRILLING REPORT

RIG CONTACT INFORMATION:

OFFICE TRAILER / FAX: 970 942 7543

CONSULTANT HAND CELL: 303 913 1054

DOGHOUSE: 307 268 7316

PUSHER:

DATE SPUD DATE	6AM DEPTH					
8/19/2004 8/16/2004	1003					
REPORT NO.	24 HR FOOTAGE					
4	134					
DRLG CONTRACTOR	DAYS SINCE SPUD					
Elenburg, Rig 12	4					
CONSULTANT	AFE# API#					
John C. Lamb	43-007-30718					

ACTIVITY AT REPORT TIME:

Drilling ahead

CI	IRONOLOG	Y OF DAIL	Y OPERATIONS (06:00 - 06:00 HRS)	SLOW	PUMP RA	TE DATA:		STRIN	G WEIGHT INFO	ORMATION:				
FROM	TO	HOURS	The state of the s	Depth	SPM	Pressure	Eff BHA WI	Rotating:	Slackoff:	Hoisting:				
(hrs)	(hrs)	(hrs)	Activity:	966	54	250	43,000	76,000	73,000	78,000				
06:00	07:00	1.00	PU & Scribe BHA, checked pump pressure - seemed ok	with 210 p	si			***						
07:00	08:30	1.50	Trip in hole											
08:30	09:00	0.50	Service rig											
09:00	11:30	2.50	Trip in hole, to check for holes in pipe or other circulator	y issues, w	e stopped	and broke circ	ulation at 286'	with 400 psi; 6	326' with 550 psi	- everything OK				
11:30	12:15	0.75	Broke circulation at TD and had pump pressure drop to	250 psi witl	h decrease	d volume								
12:15	13:00	0.75	Trip up into casing											
13:00	16:45	3.75	Break apart and inspect mud pump suction lines and dis	samble ch	arger pum	o - no problem	s found - go thr	ough mud pu	mp again - finally	found small				
	1		ece of ceramic debriis from surface pipe cement wiping plug in mud pump cavity - looked for and found leaking possum belly bypass gate has been											
			llowing cuttings (and plug debriis) to enter mud tanks, rather than going over shaker, reassemble charger pump, mud pump and pump's suction lines											
16:45	17:15	0.50	Trip in hole											
17:15	17:30	0.25	Rotate 869 - 872, lost pump pressure											
17:30	18:45	1.25	Clean more float debriis from pump, dump and cleaned	suction pit	- found a fe	ew more piece	s of debriis							
18:45	21:30	2.75	Rotate 872 - 899, lost 20 bbl mud while drilling											
21:30	21:45	0.25	Build and pump LCM sweep to heal seepage											
21:45	06:00	8.25	Rotate 899 - 1003											
										<u> </u>				
	<u> </u>													
	ļ <u>.</u>													
									Dr	70 - 70 - 70				
						····				IULIVEN				
									- DF	C 1 3 2004				
	-									~ · J ZUU4				
									in oca	W 75.4.6				
				_					VIV. UT U	IL. GAS & MINING				
TOTAL	HOURS	24.00								17: 71/ 5%				

	DAILY	CUM
DESC.	(hrs)	(hrs)
Drill	11.50	30.50
Trip		10.75
Circulate	0.25	0.75
Rig Repair	11.75	21.50
Rig Service	0.50	1.25
Dev Survey		
NU / ND		8.50
Cement		
Run Casing		
woc		
OH Logging		
Mix Mud		
MI & RU		6.00
Rat Hole		
Mouse Hole		
Fishing		
DST		
Coring		
inspect BHA		
Cut drig line		
Wash & Ream		
Drill Cement		6.25
Test BOPE		1.50
woo		
PU/LD BHA		7.00
insp circ equip		3.50
TOTALS	24.00	97.50

			DAILY		CUM	AFE
COST CODE	DESCRIPTION OF DAILY COSTS		(\$)		(\$)	(\$)
2030.010	Land, Legal, Title, Survey, Arch, Damages, Permits, Signs					
2030.031	Dirtwork, Road, Location, Pits, Liner			<u> </u>		
2030.019	Contract Drilling 9480 / day 392.5 / h cond 5071 26,000 mob sfc 36791	\$	9,480	\$	102,872	
2032.001	Water			\$	945	
2032.013	Drill Bits, Stabilizers, Reamers			\$	12,000	
2031.046	Cementing and Services			\$	5,000	
2030.053	Coring and Analysis					
2030.052	Logging			L		
2030.054	Mud Logging					
2030.037	Rental Equipment	\$	1,501	\$	8,362	
2030.028	Transportation			\$	7,950	
2032.004	Mud and Chemicals	\$	898	\$	7,396	
	Directional Services, Mud Motors	\$	6,734	\$	22,402	
	Intermediate casing			ļ		
2030.035	Contract Labor			\$	2,920	
2030.022	Engineering / Supervision	\$	800	\$	3,200	
2030.099	Intangible Miscellaneous and Contingencies					
2040.001	Surface Casing			\$	17,790	
2040.004	Production Casing					
1011.000	Float Equipment, Shoes, Centralizers					
1041.000	Wellhead Equipment			\$	4,941	
1073.000	Bottom Hole Pump / Gas Lift / Other			L		
1104.000	Drivehead, Engine / Motor and Hydraulic Pump / Electric Unit					
2040.052 / 2040.055	Valves and Fittings, Small / Large					
2040.067	Other Surface Equipment					
2040.099	Tangible Miscellaneous and Contingencies					
	TOTAL COSTS	s	19,413	S	195,778	S

eport#		Date:	08/20/04	ma.	UA		ILLING	REPO	RT						
	- 272		Well Na	me.		Je		T RECOR	D						
BUT	BV T		T			DEPTH	DEPTH	FOOTAGE	CLAN BYT				BIT	В	IT GRADING
NO.	SIZE			SERIAL	JETS	IN	оυт	DRILLED	HOURS	ROP	WOB	RPM	TORQUE		Carlo Carlo Dull C
0	(In)	MFG	TYPE	NO.	(32/32/32)	(A)	(A)	(R)	(hrs)	(fUhr)	20.22	MTR/TBL	(R - lbs)		Seals Gge Dull C
1	12 1/4	Security	XL18N	754840	14 / 14 / 14 / 16	494		(494)	16.75	-29.5 #DIV/DI	20 - 23	45 / 60	1200 - 1800	 -	
								0		#DIV/0! #DIV/0!	+	-	 		
				+			 	0	-	#DIV/0!	+	· ·	†		
				+		 		0		#DIV/0!	+		T -		
				 	- · · · · · · · · · · · · · · · · ·			0		#DIV/0!	1				
								0		#DIV/0!				L.	
COMME	ENTS														
		MENT I		1						CASING	DATA		1 335	777. 65	
RENTAL.	AL EQUIP						T		EXTERNAL	INTERNAL			TOP	BOTTOM	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
ITEM	DAILY COSTS	CUM COSTS		SIZE	WEIGHT	GRADE	CONIN	DRIFTID	COLLAPSE	YIELD	CAPACITY	LENGTH	SET AT	SET AT	
//	(\$)	(\$)				V 100			(pti)	(psi)	(bbls/ft)	(ft)	(ft)	(n KB)	
ang Qtrs	\$ 315	\$ 1,260		30"	NA	NA						40.00	0.00	40.00	
	\$ 45	\$ 180		13 3/8"	54.5	J55	ST&C	12.459	1,130	2,730	0.15450	500.00	2.00	498.00	
	\$ 60	\$ 240									<u> </u>	L		ļ	
	\$ 20	\$ 80			L	L	L	L.,——	L					L	
	\$ 50	\$ 200							оттомно	I E ASSE	MDÏV			 	1 A1 A1
	\$ 375	\$ 1,500	245 (2011) 1000 (1000)						OTTOWN	MAXIMUM	WINIMUM		Table 1	100 100	17
	\$ 100	\$ 400						7.00	AD SIZE	0.0.	I.D.	LENGTH	1.0	HRS SINCE	
	\$ 90	\$ 360		CRIPTION OF		P#O	MDER	Box	PIN	(In)	(In)	(ft)	HOURS RUN	INSPECTION	
aud clnr	£ 400	\$ 375 \$ 3,017	DES	Bit	Bria		urity	DOA	6 5/8 R	12.250		1.25			
	\$ 196 \$ 250	\$ 750	7/8 Lob	• 4 Stage M	lud Motor		DI	6 5/8 R	6 5/8 R	8.000		29.52			
. 490	J 250	- 130	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Float Sub			DI	6 5/8 R	6 5/8 R	8.000	3.000	3.02	ļ	ļ	ļ
			Gr	iffith Shock	Sub		idle	6 5/8 R	6 5/8 R	8.000	2.688	11.99		 	
			М	onel Drill Co	ollar		DI	6 5/8 R	6 5/8 R	8.000	3.250	30.58	ļ	_	
			Hang	Off Sub & C	Sap Sub		DI	6 5/8R	6 5/8 R	7.750	3.750	8.94		 	
				ΧO			DI	6 5/8 H90	6 5/8 R	8.000	3.250	2.35	 	ļ	
			7 - 7	7 3/4" Drill C	ollars		ig	6 5/8 H90	6 5/8 H90	7.750	2.250	340.02	 	 	
			—	XO Dail C	`allara		DI	4 1/2 XH 4 1/2 XH	6 5/8 H90 4 1/2 XH	7.750 6.500	2.625	2.35 309.53		 	
OTALS :	\$ 1,501	\$ 8,362	10 -	6 1/2 Drill C	ollars		ig	4 1/2 XH	4 1/2 XH	0.500	1 2.230	508.53	<u> </u>	<u> </u>	1
	12.7	e i Militario di		9.	Maria II	Part (DRILLIN	G MUD R	EPORT						.84, 774
AMPLE	7 1865 V	MUD	FUNNEL			GEL	FILTRATE		CAKE		SAND	3.50			1 75.22
EPTH	TIME	WT.	VISCOSITY	PV / YP	ка.	STRENGTH	API	CALCIUM	THICKNESS	souns	CONTENT	pН	CHLORIDES	ALKAUNITY Pf/Mf	LCM (b/gal
(R)	(hh:mm)	(ppg)	(s ec/qt)		(%)	(Ib/100 ft2)	(mi/30 min)	(ppm)	(/32 ln)	(% vol) 2.0	(% vol)	12.5	(ppm) 16,000	2.3 / 4.25	
634	08:00	8.70	32	4/8	2.70	4/9	24.0 24.0	20	2	2.0	1/4	10.5	10,000	2.07 4.20	
930	00:00 05:30	8.80 8.70	34	+			32.0				1	10.5		†	
990	05:30	8.70													
s in spi		自由电流管理				DA	ILY MUD	COST & I	NVENTOR	Υ					
176												CEDAR	TRUCKING		TOTAL COSTS
			BARITÉ (sx)	QUICK GEL	CAUSTIC (sx)	LIME (ex)	SODA ASH	UNIDRILL (sx)	SOLKWICK (ex.)	PACR (sx)	PHPA (gall)	CEDAR (6x)	(\$)		(5)
COST			(BX)	(**)	(PA)		147/								
RTING INVE	INTORY		120	L											
NTORY REC													\\\\\\\	X/////////////////////////////////////	
DLAST 24 H													<i>\\\\\\\\</i>	X/////////////////////////////////////	
ING INVENT				ļ				L	L		 				
Y MUD COS											+		 	 	
VIOUS CUMI ULATIVE MI	ULATIVE COST						 	-	-		+		 		
LATIVE MI	~ wai														
12,15								GGER R			a (
	GAS DATA (in L	inits)	SHOW INTER		_	F PENETRATI			SHOW GAS DA	AFTER	Formation 1	ons:			
BACK				10	BEFORE	DURING	AFTER	BEFORE UNITS	DURING	UNITS		оро.			
	CONIN	TRIP	FROM	440000		(A)	(ft)	UNIS	CAMITO	UNIS		centages:			
ROUND	CONN GAS	TRIP GAS	FROM (R)	(R)	(4)										
ROUND	. 100000000	A		(M)							Sample Descri				
ROUND	. 100000000	A		(%)	101										
ROUND	. 100000000	A		(%)											
ROUND	. 100000000	A		(1)											
ROUND	. 100000000	A		(0)			DEVIAT	ION SU	RVEYS						
	GAS	GAS	(0)						100000000000000000000000000000000000000	Azimuth	Sample Descr		Deviation	Azimuth	DL Angle
apth	. 100000000	A		Depth	Deviation				RVEYS Deviation	Azimuth		ription:	Deviation	Azimuth	DL Angle
apth 538	GAS Deviation	GAS Azimuth	DL Angle 0.19 0.76						100000000000000000000000000000000000000	Azimuth	Sample Descri	ription:	Deviation	Azimuth	DL Angle
Papth 538 566 602	Deviation 1.03 1.22 1.20	Azimuth 184.79 189.53 186.87	D£ Angle 0.19 0.78 0.17						100000000000000000000000000000000000000	Azimuth	Sample Descri	ription:	Deviation	Azimuth	DL Angle
epth 538 566 602 633	Deviation 1.03 1.22 1.20 1.25	Azimuth 184.79 189.53 186.87 188.91	DL Angle 0.19 0.78 0.17						100000000000000000000000000000000000000	Azimuth	Sample Descri	ription:	Deviation	Azimuth	DL Angle
epth 538 566 602 633 664	Deviation 1.03 1.22 1.20 1.25 1.34	Azimuth 184.79 189.53 186.87 186.87 180.49	DL Angle 0.19 0.76 0.17 0.21 0.68						100000000000000000000000000000000000000	Azimuth	Sample Descri	ription:	Deviation	Azimuth	DL Angle
epth 538 566 602 533 864 595	Deviation 1.03 1.22 1.20 1.25 1.34 1.26	Azimuth 184.79 189.53 186.87 180.49 180.29	DL Angle 0.19 0.78 0.17 0.21 0.68						100000000000000000000000000000000000000	Azimuth	Sample Descri	ription:	Deviation	Azimuth	DL Angle
epth 538 566 602 633 664 695 727	Deviation 1.03 1.22 1.20 1.25 1.34 1.26 1.32	Azimuth 184.79 189.53 186.87 188.91 180.49 180.29 175.88	DL Angle 0.19 0.78 0.17 0.21 0.68 0.26 0.36						100000000000000000000000000000000000000	Azmuth	Sample Descri	ription:	Deviation	Azimuth	DL Angle
spth 533 566 602 633 664 695 727 757	Deviation 1.03 1.22 1.34 1.34 1.34	Azimuth 184.79 189.53 180.67 180.87 180.29 175.88 164.40	DL Angie 0.19 0.78 0.17 0.21 0.68 0.26 0.36 0.36						100000000000000000000000000000000000000	Asimuth	Sample Descri	ription:	Deviation	Azimuth	DL Angle
spth 533 566 602 633 664 695 727 757 787	Deviation: 1.03 1.22 1.20 1.25 1.34 1.26 1.32 1.34 1.33	Azimuth 184.79 189.53 186.87 180.49 180.29 175.88 184.40 162.92	DL Angle 0.19 0.78 0.17 0.21 0.68 0.26 0.36 0.89						100000000000000000000000000000000000000	Azimuth	Sample Descri	ription:	Deviation	Azimuth	DL Angle
epth 538 566 602 633 664 695 7727 787 818	Deviation 1.03 1.22 1.20 1.25 1.34 1.26 1.32 1.33 1.48	Azimuth 184.79 189.53 186.87 188.91 190.49 190.49 175.88 184.40 182.92 175.88	DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.65						100000000000000000000000000000000000000	Azimuth	Sample Descri	ription:	Deviation	Azimuth	DL Angle
spth 5585 566 602 633 864 595 727 7757 787 818 845	Deviation 1.03 1.22 1.25 1.34 1.32 1.34 1.33 1.44 1.48 1.44 1.43	Azimuth 184.79 189.53 186.57 188.91 190.49 180.29 175.83 164.40 182.92 155.82 143.19	DL Angle 0.19 0.78 0.17 0.21 0.68 0.26 0.36 0.89						100000000000000000000000000000000000000	Azimuth	Sample Descri	ription:	Deviation	Azimuth	DL Angle
epth 5538 566 6022 633 664 695 727 757 787 8818 845	Deviation 1.03 1.22 1.20 1.25 1.34 1.26 1.32 1.33 1.48	Azimuth 184.79 189.53 186.87 188.91 190.49 190.49 175.88 184.40 182.92 175.88	DL Angle 0.19 0.78 0.17 0.21 0.68 0.26 0.36 0.39 0.12 0.68 1.29						100000000000000000000000000000000000000	Azimuth	Sample Descri	ription:	Deviation	Azimuth	DL Angle
epth 538 566 602 533 664 595 727 757 787 787 818 845 5377	Deviation: 1.03 1.22 1.20 1.25 1.34 1.26 1.32 1.34 1.43 1.43 1.43 0.84	Azimuth 184.79 189.53 186.87 188.91 180.49 180.29 175.88 184.40 162.92 156.82 143.19	DL Angle 0.19 0.78 0.17 0.21 0.68 0.26 0.36 0.36 0.12 0.65 1.29 1.85						100000000000000000000000000000000000000	Azimuth	Sample Descri	ription:	Deviation	Azimuth	DL Angle
epth 538 566 602 633 664 695 727 757 787 818 818 845 877 908	Deviation 1.03 1.22 1.25 1.34 1.32 1.34 1.48 1.43 0.84 0.71	Azimuth 194.79 189.53 186.87 188.91 180.29 175.88 194.40 192.92 156.82 143.19 137.08 130.59	DL Angle 0.19 0.76 0.17 0.21 0.68 0.36 0.89 0.12 0.65 1.29 1.88 0.51						100000000000000000000000000000000000000	Azimuth	Sample Descri	ription:	Deviation	Azimuth	DL Angle
epth 538 566 602 533 664 595 727 757 787 787 818 845 5377	Deviation 1.03 1.22 1.25 1.34 1.32 1.34 1.48 1.43 0.84 0.71	Azimuth 194.79 189.53 186.87 188.91 180.29 175.88 194.40 192.92 156.82 143.19 137.08 130.59	DL Angle 0.19 0.76 0.17 0.21 0.68 0.36 0.89 0.12 0.65 1.29 1.88 0.51						100000000000000000000000000000000000000	Azimuth	Sample Descri	ription:	Deviation	Azimuth	DL Angle
epth 538 566 602 633 664 695 727 757 787 818 818 845 877 908	Deviation 1.03 1.22 1.25 1.34 1.32 1.34 1.48 1.43 0.84 0.71	Azimuth 194.79 189.53 186.87 188.91 180.29 175.88 194.40 192.92 156.82 143.19 137.08 130.59	DL Angle 0.19 0.76 0.17 0.21 0.68 0.36 0.89 0.12 0.65 1.29 1.88 0.51						100000000000000000000000000000000000000	Azimuth	Sample Descri	ription:	Deviation	Azimuth	DL Angle
epth 538 566 602 533 664 595 727 757 787 787 818 845 5377	Deviation 1.03 1.22 1.25 1.34 1.32 1.34 1.48 1.43 0.84 0.71	Azimuth 194.79 189.53 186.87 188.91 180.29 175.88 194.40 192.92 156.82 143.19 137.08 130.59	DL Angle 0.19 0.76 0.17 0.21 0.68 0.36 0.89 0.12 0.65 1.29 1.88 0.51						100000000000000000000000000000000000000	Azimuth	Sample Descri	ription:	Deviation	Azimuth	DL Angle
epth 538 566 602 633 664 695 727 757 787 818 818 845 877 908	Deviation 1.03 1.22 1.25 1.34 1.32 1.34 1.48 1.43 0.84 0.71	Azimuth 194.79 189.53 186.87 188.91 180.29 175.88 194.40 192.92 156.82 143.19 137.08 130.59	DL Angle 0.19 0.76 0.17 0.21 0.68 0.36 0.89 0.12 0.65 1.29 1.88 0.51						100000000000000000000000000000000000000	Azimuth	Sample Descri	ription:	Deviation	Azimuth	DL Angle
epth 538 566 602 633 664 695 727 757 787 818 818 845 877 908	Deviation 1.03 1.22 1.25 1.34 1.32 1.34 1.48 1.43 0.84 0.71	Azimuth 194.79 189.53 186.87 188.91 180.29 175.88 194.40 192.92 156.82 143.19 137.08 130.59	Di. Angle 0.19 0.76 0.17 0.21 0.68 0.36 0.89 0.12 0.65 1.29 1.88 0.51						100000000000000000000000000000000000000	Azimuth	Sample Descri	ription:	Deviation	Azimeth	DLAngle
Fepth 538 566 602 633 664 695 7727 787 818 845 8877 9908	Deviation 1.03 1.22 1.25 1.34 1.32 1.34 1.48 1.43 0.84 0.71	Azimuth 194.79 189.53 186.87 188.91 180.29 175.88 194.40 192.92 156.82 143.19 137.08 130.59	Di. Angle 0.19 0.76 0.17 0.21 0.68 0.36 0.89 0.12 0.65 1.29 1.88 0.51						100000000000000000000000000000000000000	Azimuth	Sample Descri	ription:	Deviation	Aximuth	DL Angle
epth 538 566 602 633 664 695 727 757 787 818 818 845 877 908	Deviation 1.03 1.22 1.25 1.34 1.32 1.34 1.48 1.43 0.84 0.71	Azimuth 194.79 189.53 186.87 188.91 180.29 175.88 194.40 192.92 156.82 143.19 137.08 130.59	Di. Angle 0.19 0.76 0.17 0.21 0.68 0.36 0.89 0.12 0.65 1.29 1.88 0.51						100000000000000000000000000000000000000	Azimuth	Sample Descri	ription:	Deviation	Azimuth	DL Angle
Fepth 538 566 602 633 664 695 7727 787 818 845 8877 9908	Deviation 1.03 1.22 1.25 1.34 1.32 1.34 1.48 1.43 0.84 0.71	Azimuth 194.79 189.53 186.87 188.91 180.29 175.88 194.40 192.92 156.82 143.19 137.08 130.59	Di. Angle 0.19 0.76 0.17 0.21 0.68 0.36 0.89 0.12 0.65 1.29 1.88 0.51						100000000000000000000000000000000000000	Azimuth	Sample Descri	ription:	Deviation	Azimuth	DL Angle
Fepth 538 566 602 633 664 695 727 787 818 845 877 908	Deviation 1.03 1.22 1.25 1.34 1.32 1.34 1.48 1.43 0.84 0.71	Azimuth 194.79 189.53 186.87 188.91 180.29 175.88 194.40 192.92 156.82 143.19 137.08 130.59	Di. Angle 0.19 0.76 0.17 0.21 0.68 0.36 0.89 0.12 0.65 1.29 1.88 0.51						100000000000000000000000000000000000000	Azimuth	Sample Descri	ription:	Deviation	Azimuth	DL Angle
Papth 538 566 602 633 664 695 727 787 818 845 877 908	Deviation 1.03 1.22 1.25 1.34 1.32 1.34 1.48 1.43 0.84 0.71	Azimuth 194.79 189.53 186.87 188.91 180.29 175.88 194.40 192.92 156.82 143.19 137.08 130.59	Di. Angle 0.19 0.76 0.17 0.21 0.68 0.36 0.89 0.12 0.65 1.29 1.88 0.51						100000000000000000000000000000000000000	Asimuth	Sample Descri	ription:	Deviation	Azimuth	DL Angle
Fepth 538 566 602 633 664 695 727 787 818 845 877 908	Deviation 1.03 1.22 1.25 1.34 1.32 1.34 1.48 1.43 0.84 0.71	Azimuth 194.79 189.53 186.87 188.91 180.29 175.88 194.40 192.92 156.82 143.19 137.08 130.59	Di. Angle 0.19 0.76 0.17 0.21 0.68 0.36 0.89 0.12 0.65 1.29 1.88 0.51						100000000000000000000000000000000000000	Azimuth	Sample Descri	ription:	Deviation	Azimuth	DL Angle
spth 5538 5566 602 633 6844 6955 7727 757 738 738 738 748 749 758 759 759 759 759 759 759 759 759 759 759	Deviation: 1.03 1.22 1.25 1.34 1.26 1.32 1.34 1.46 1.43 0.84 0.71 0.86	Azimuth 194.79 189.53 186.57 180.91 180.29 175.85 164.40 162.92 156.82 143.19 137.08 130.59 112.85	Di. Angle 0.19 0.76 0.17 0.21 0.68 0.36 0.89 0.12 0.65 1.29 1.88 0.51						100000000000000000000000000000000000000	Azimuth	Sample Descri	ription:	Deviation	Azimuth	DL Angle
papth 5338 5566 602 633 664 695 7727 757 737 787 787 787 787 787 787 787 787 78	Deviation: 1.03 1.22 1.20 1.25 1.34 1.26 1.32 1.34 1.48 1.43 1.40 0.71 0.86	Azimuth 194.79 189.53 186.57 180.91 180.29 175.85 164.40 162.92 156.82 143.19 137.08 130.59 112.85	Di. Angle 0.19 0.76 0.17 0.21 0.68 0.36 0.89 0.12 0.65 1.29 1.88 0.51						100000000000000000000000000000000000000	Azimuth	Sample Descri	ription:	Deviation	Aximuth	DL Angle
papth 5338 5566 602 633 664 695 7727 757 737 787 787 787 787 787 787 787 787 78	Deviation: 1.03 1.22 1.25 1.34 1.26 1.32 1.34 1.46 1.43 0.84 0.71 0.86	Azimuth 194.79 189.53 186.57 180.91 180.29 175.85 164.40 162.92 156.82 143.19 137.08 130.59 112.85	Di. Angle 0.19 0.76 0.17 0.21 0.68 0.36 0.89 0.12 0.65 1.29 1.88 0.51			Azimuth	DL Angle	Depth	Deviation	Asimuth	Sample Descri	ription:	Deviation	Azimuth	DL Angle
7 Papth 5338 5566 602 633 664 695 727 757 757 757 757 757 757 757 757 75	Deviation: 1.03 1.22 1.25 1.34 1.26 1.32 1.34 1.46 1.43 0.84 0.71 0.86	Azimuth 194.79 189.53 186.57 180.91 180.29 175.85 164.40 162.92 156.82 143.19 137.08 130.59 112.85	Di. Angle 0.19 0.19 0.76 0.17 0.21 0.68 0.28 0.38 0.89 0.12 0.68 1.29 1.88 0.51	Depth	Deviation	Azimuth	DL Angle	Depth	100000000000000000000000000000000000000		DL Angle	Depth.	Deviation		
Depth 538 566 602 633 664 695 727 757 787 818 845 877 908 938	Deviation: 1.03 1.22 1.25 1.34 1.26 1.32 1.34 1.46 1.43 0.84 0.71 0.86	Azimuth 194.79 189.53 186.57 180.91 180.29 175.85 164.40 162.92 156.82 143.19 137.08 130.59 112.85	DL Angle 0.19 0.78 0.17 0.21 0.68 0.26 0.39 0.12 0.65 1.29 1.88 0.51 0.95	Depth	Deviation	Asimuth	DL Angle	Papth Papth	Deviation	QR	DL Angle	Depth Depth		Aximuth Aximuth Aximuth	
538 566 602 633 664 695 727 757 787 818 845 847 908 938	Deviation: 1.03 1.22 1.25 1.34 1.26 1.32 1.34 1.46 1.43 0.84 0.71 0.86	Azimuth 194.79 189.53 186.57 180.91 180.29 175.85 164.40 162.92 156.82 143.19 137.08 130.59 112.85	Di. Angle 0.19 0.19 0.76 0.17 0.21 0.68 0.28 0.38 0.89 0.12 0.68 1.29 1.88 0.51	Depth	Deviation	Azimuth	DL Angle	Depth	Deviation		DL Angle	Depth.	Deviation Deviation	ANNLARVE	LOCITY DC ((Wmin)
Depth 538 566 6602 633 664 6695 727 757 787 818 845 877 9908 938 ESTIMATE SAMP	Deviation: 1.03 1.22 1.20 1.25 1.34 1.26 1.32 1.33 1.48 1.43 0.71 0.86	Azimuth 184.79 189.53 180.67 180.89 180.29 175.85 164.40 182.92 156.82 143.19 137.08 130.59 112.85	DL Angle 0.19 0.78 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.63 1.29 1.85 0.51 0.95	Depth	Deviation Deviation ASSUMED EFF	PIPPUMP RATE	UMP & C	Depth	Deviation	QRR Standpipe	Sample Described in the control of t	Depth Ls	DP	ANNLARVE	Logiv
Papth 5535 566 602 633 664 695 727 737 787 1818 845 847 9908 9938 654 655 655 655 655 655 655 655 655 655	Deviation: 1.03 1.22 1.20 1.25 1.34 1.32 1.34 1.43 0.54 1.43 0.54 0.71 0.86	Azimuth 194.79 189.53 186.87 188.91 180.49 180.29 175.88 194.40 182.92 156.82 143.19 137.08 130.59 112.85	Di. Angle 0.19 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51 0.95	Depth STROKE LEWITH (17)	Deviation ASSUMED EFF ('9)	PUMP	UMP & C	PCULAT PUMP PLUMETRIC DI LUMETRIC DI LUMET	Deviation	CJR(III) Standplor (psi)	Sample Described in the control of t	Depth Depth LS H=P (Sq in)	DP (Wmin)	ANN.LAR VE OC ((Vmin)	LOCITY DC ((Wmin)

EV_KGREEN OPERATING, INC. DAILY DRILLING REPORT

RIG CONTACT INFORMATION:			
OFFICE TRAILER / FAX:	970 942 7543		
CONSULTANT HAND CELL:	303 913 1054		
DOGHOUSE:	307 268 7315		
PUSHER:			

DATE SPUD DATE	SAM DEPTH
8/21/2004 8/16/2004	1278
REPORT NO.	24 HR FOOTAGE
5	275
DRLG CONTRACTOR	DAYS SINCE SPUD
Elenburg, Rig 12	5
CONSULTANT	AFE# API#
John C. Lamb	43-007-30718

ACTIVITY AT REPORT TIME:

Drilling ahead

СН	RONOLOG	Y OF DAIL	Y OPERATIONS (06:00 - 06:00 HRS)	SLOW	PUMP RA	TE DATA:		STRIN	G WEIGHT INFO	ORMATION:
			The state of the s	Depth	SPM	Pressure	Eff BHA Wt	Rotating:	Slackoff:	Hoisting:
ROM (hrs)	TO (hrs)	HOURS (hrs)	Activity:	1247	54	250	43,000	75,000	73,000	77,000
06:00	08:15	2.25	Rotate 1003 - 1027							
08:15	08:45	0.50	Service rig			_				
08:45	15:45	7.00	Rotate 1027 - 1115							
15:45	16:00	0.25	Service rig - clean, inspect and adjust drum brakes							
16:00	00:00	8.00	Rotate 1115 - 1214		_					
00:00	02:00	2.00	Slide 1115 - 1229							
02:00	06:00	4.00	Rotate 1229 - 1278							
			-							
									KE	CEIVED
									DE	C 1 3 2004
										PIL, GAS & MININ
TOTAL		24.00								

	DAILY	CUM
DESC.	(hrs)	(hrs)
Drill	23.25	53.75
Trip		10.75
Circulate		0.75
Rig Repair		21.50
Rig Service	0.75	2.00
Dev Survey		l
NU/ND		8,50
Cement		
Run Casing		
woc		
OH Logging		
Mix Mud		
MI & RU		6.00
RatHole		ļ. <u></u>
Mouse Hole		1
Fishing		
DST		
Coring		
Inspect BHA		
Cut drlg line		
Wash & Ream		
Drill Cement		6.25
Test BOPE		1.50
woo		
PU/LD BHA		7.00
inspicinc equip		3.50
TOTALS	24.00	121.50

COST CODE	DESCRIPTION OF DAILY COSTS	1.000	AILY (\$)		(\$)	AFE (5)
2030.010	Land, Legal, Title, Survey, Arch, Damages, Permits, Signs					
2030.031	Dirtwork, Road, Location, Pits, Liner					
2030.019	Contract Drilling 9480 / day 392.5 / h cond 5071 26,000 mob sfc 36791	\$	9,480	\$	112,352	
2032.001	Water			\$_	945	
2032.013	Drill Bits, Stabilizers, Reamers			\$	12,000	
2031.046	Cementing and Services			\$	5,000	
2030.053	Coring and Analysis					
2030.052	Logging					
2030.054	Mud Logging					
2030.037	Rental Equipment	\$	1,501	\$	9,863	
2030.028	Transportation			\$	7,950	
2032.004	Mud and Chemicals			\$	7,396	
	Directional Services, Mud Motors	\$	6,234	\$	28,636	
	Intermediate casing					
2030.035	Contract Labor			\$	2,920	
2030.022	Engineering / Supervision	\$	800	\$	4,000	
2030.099	Intangible Miscellaneous and Contingencies					
2040.001	Surface Casing			\$	17,790	
2040.004	Production Casing					
1011.000	Float Equipment, Shoes, Centralizers					
1041.000	Wellhead Equipment			\$	4,941	
1073.000	Bottom Hole Pump / Gas Lift / Other					
1104.000	Drivehead, Engine / Motor and Hydraulic Pump / Electric Unit	1				
2040.052 / 2040.055	Valves and Fittings, Small / Large					
2040.067	Other Surface Equipment					
040.099	Tangible Miscellaneous and Contingencies					
.=	TOTAL COSTS	s	18,015	S	213,793	s

Well NAME		
Jensen 1-18		
LOCATION DATA		
NW NW Sec 16 '-12S	, R-10E	
FOOTAGES	GL	КВ
550' FNL 500' FWL	7569	7580

EV_RGREEN OPERATING, INC. DAILY DRILLING REPORT

RIG CONTACT INFORMATION:			
OFFICE TRAILER / FAX:	970 942 7543		
CONSULTANT HAND CELL:	303 913 1054		
DOGHOUSE:	307 268 7315		
PUSHER:			

DATE SPUD DATE	SAM DEPTH
8/22/2004 8/16/2004	1525
REPORT NO.	24 HR FOOTAGE
6	247
DRLG CONTRACTOR	DAYS SINCE SPUD
Elenburg, Rig 12	6
CONSULTANT	AFE# API#
John C. Lamb	43-007-30718

ling ahe		OK OF DAIL	Y OPERATIONS (06:00 - 06:00 HRS)	SLOW	PUMP RA	TE DATA:		STRIN	IG WEIGHT INFO	ORMATION:
СН	RONOLO			Depth	SPM	Pressure	Eff BHA Wt	Rotating:	Slackoff:	Hoisting:
FROM	то	HOURS	Activity:	1494	54	250	43,000	75,000	74,000	76,000
(hrs)	(hrs)	(hrs)	the state of the s	1			1			
06:00	07:15	1.25	Rotate 1278 - 1290			-				
07:15	07:45	0.50	Service rig							
07:45	05:30	21.75	Rotate 1290 - 1525							
05:30	06:00	0.50	At connection, pull 4 joints to retrieve pipe screen							
										
									1-4 (\sum \lambda \)	11 (5
	-								RECE	VEU
									DEC 13	2004
									DEO 13	2001
								DIV	OF OIL GA	S & MINING
		<u> </u>								
	 									
TOTAL	HOURS	24.00								

	DAILY	CUM
DESC.	(hrs)	(hrs)
Drill	23.00	76.75
Trip		10.75
Circulate		0.75
Rig Repair	0.50	22.00
Rig Service		2.00
Dev Survey		
NU / ND		8.50
Cement		
Run Casing		
woc		
OH Logging		
Mix Mud		
MI & RU		6.00
RatHole		
Mouse Hole		
Fishing		
Other	0.50	0.50
Coring		
Inspect BHA		
Cut drig line		
Wash & Ream		
Drill Cement		6.25
Test BOPE	l	1.50
woo		
PU/LD BHA		7.00
insp circ equip		3.50
TOTALS	24.00	145.50

COSTCODE	DESCRIPTION OF DAILY COSTS		DAILY (\$)		CUM (\$)	AFE (\$)	
2030 010	Land, Legal, Title, Survey, Arch, Damages, Permits, Signs			<u> </u>			
2030.031	Dirtwork, Road, Location, Pits, Liner						
2030.019	Contract Drilling 9480 / day 392.5 / h cond 5071 26,000 mob sfc 36791	\$	9,480	\$	121,832		
2032.001	Water	\$	648	\$	1,593		
2032.013	Drill Bits, Stabilizers, Reamers			\$	12,000		
2031.046	Cementing and Services			\$_	5,000		
2030.053	Coring and Analysis	_		! —			
2030.052	Logging			1			
2030.054	Mud Logging			ļ			
2030.037	Rental Equipment	\$	1,501	\$_	11,337		
2030.028	Transportation	\$	412	\$	8,362		
2032.004	Mud and Chemicals			\$	7,396		
	Directional Services, Mud Motors	\$	6,234	\$	34,870		
	Intermediate casing			<u> </u>			
2030.035	Contract Labor			\$	2,920		
2030.022	Engineering / Supervision	\$	800	\$	4,800		
2030.099	Intangible Miscellaneous and Contingencies			ļ			
2040.001	Surface Casing			\$	17,790		
2040.004	Production Casing			ļ			
1011.000	Float Equipment, Shoes, Centralizers	1_		ļ			
1041.000	Wellhead Equipment			\$	4,941		
1073.000	Bottom Hole Pump / Gas Lift / Other	\perp		1			
1104.000	Drivehead, Engine / Motor and Hydraulic Pump / Electric Unit			1			
2040.052 / 2040.055	Valves and Fittings, Small / Large	\perp		<u> </u>			
2040.067	Other Surface Equipment			<u> </u>			
2040.099	Tangible Miscellaneous and Contingencies						
	TOTAL COSTS	s	19,075	5	232,841	s	

WELL NAME Jensen 1-18 43-009-30918 LGCATION DATA NIME Sec 16 T-12S, R-10E GL KB FOOTAGES GL KB COUNTY, STATE Carbon County, Utah

EVERGREEN OPERATING, INC. DAILY DRILLING REPORT

RIG CONTACT INFORMATION:				
OFFICE TRAILER / FAX:	970 942 7543			
CONSULTANT HAND CELL:	303 913 1054			
DOGHOUSE:	307 258 7315			
PUSHER:				

DATE SPUD DATE	6AM DEPTH
8/24/2004 8/16/2004	1859
REPORT NO.	24 HR FOOTAGE
8	159
DRLG CONTRACTOR	DAYS SINCE SPUD
Elenburg, Rig 12	8
CONSULTANT	AFE# API#
John C. Lamb	43-007-30718

ACTIVITY AT REPORT TIME:	DAILY COST	CUM COST	AFE COSTS
	\$ 30.520	\$ 284,055	-
Drilling ahead	4 50,525		

CH	IRONOLOG	SY OF DAIL	LY OPERATIONS (06:00 - 06:00 HRS)	SLOW	PUMP RA	TE DATA:	STRING WEIGHT INFORMATION:			
FROM	то	HOURS		Depth	SPM	Pressure	Eff BHA Wt	Rotating:	Slackoff:	Hoisting:
(hrs)	(hrs)	(hrs)	Activity:	1713	54	250	43,000	90,000	88,000	92,000
06:00	10:45	4.75	Rotate 1740 - 1793			• • • • • • • • • • • • • • • • • • • •				
10:45	11:45	1.00	Rig service and ream tight connection	****						
11:45	12:15	0.50	Rotate 1793 - 1799							
12:15	17:00	4.75	Trip out of hole, few sticky spots up to 1400'							
17:00	20:30	3.50	Lower mast and respot rig over wellhead							
20:30	00:15	3.75	Trip in hole							
00:15	01:45	1.50	Wash and ream 1400 - 1799							
01:45	06:00	4.25	Rotate 1799 - 1859							

	<u> </u>	1								
	 									
										12 / 1
									142-11	IVED
									DEC 1	3 2004
									שבנו	<u> </u>
	1									
									WACAH C	*********
								الا	V. UF UIL, C	IAS & MINING
TOTAL	HOURS	24.00								

SUMMARY (DAILY	CUM
DESC.	(hrs)	(hrs)
Drill		97.50
Trip		13.75
Circulate		0.75
Rig Repair		22.00
Rig Service		2.25
Dev Survey		
NU / ND		8.50
Cement]
Run Casing		
woc		
OH Logging		
Mix Mud		
MI & RU		6.00
Rat Hole		
Mouse Hole		
Fishing		
Other		0.50
Coring		
Inspect BHA		
Cut drig line		
Wash & Ream		
Drift Cement		6.25
Test BOPE		1.50
woo		<u> </u>
PU/LD BHA		7.00
inspicirc equip		3.50
TOTALS	0.00	169,50

COST CODE	DESCRIPTION OF DAILY COSTS	DAILY (\$)		CUM (\$)	AFE (\$)
2030.010	Land, Legal, Title, Survey, Arch, Damages, Permits, Signs				
2030.031	Dirtwork, Road, Location, Pits, Liner				
2030.019	Contract Drilling 9480 / day 392.5 / h cond 5071 26,000 mob sfc 36791	\$ 9,480	\$	140,792	
2032.001	Water		\$	1,971	
2032.013	Drill Bits, Stabilizers, Reamers	\$ 12,000	\$	24,000	
2031.046	Cementing and Services		\$	5,000	
2030.053	Coring and Analysis			***	
2030.052	Logging				
2030.054	Mud Logging	 		****	
2030.037	Rental Equipment	\$ 1,501	\$	14,416	
2030.028	Transportation		\$	8,362	
2032.004	Mud and Chemicals	\$ 505	\$_	10,125	
	Directional Services, Mud Motors	\$ 6,234	\$	47,338	
	Intermediate casing				1//-T
2030.035	Contract Labor		\$	2,920	
2030.022	Engineering / Supervision	\$ 800	\$	6,400	
2030.099	Intangible Miscellaneous and Contingencies		L.,		
2040.001	Surface Casing		\$	17,790	
2040.004	Production Casing				
1011.000	Float Equipment, Shoes, Centralizers				
104 1.000	Wellhead Equipment		\$	4,941	
1073.000	Bottom Hole Pump / Gas Lift / Other				
1104.000	Drivehead, Engine / Motor and Hydraulic Pump / Electric Unit				
2040.052 / 2040.055	Valves and Fittings, Small / Large				
2040.067	Other Surface Equipment				
2040.099	Tangible Miscellaneous and Contingencies	·			
	TOTAL COSTS	\$ 30,520	s	284,055	s .

		Date:	08/24/04 Well Na	me:	<u>DA</u>	VILY DR	nsen 1-18		KI .			-			Page 2
		ь				-		T RECOR	D						
gut	BIT		1	1.		DEPTH	DEPTH	FOOTAGE	CUM BIT				вт	. es	T GRADING
NO.	SIZE		. 1	SERIAL	JETS	IN	out	DRILLED	HOURS	ROP -	WOB	RPM	TORQUE		Santa Can Dull 1
(F)	(ln)	MFG	TYPE	NO.	(32/32/32)	(R)	(R)	(ft)	(hrs)	(f//hr)	(F3)	MTR/TBL	(ft - itss) 2100 - 2900	In Out Dull Loc 6 7 WT ALL	Seals Gge Dull (EFE 1/8 CI
1	12 1/4	Security	XL18N		14 / 14 / 14 / 10		1,799	1,305	102.75	12.7	36 - 43 38 - 40	45 / 60 45 / 60	1500 - 2500	J / WYI ALL	21 L 1/0 QI
2	12 1/4	Security	XL43	10408516	18 / 18 / 18	1,799	1,860	61	4.25	#DIV/01	38 - 40	45/60	1500 - 2500		
						 		0		#DIV/0!	1	†			
			+	 				0		#DIV/0!	-				
			 	1			<u> </u>	0		#DIV/0!					
			1					0		#DIV/0!					
COMM	MENTS														
BENT	AL EQUIP	MENT I		T				.:		CASING I	DATA			3.5	
RENTAL	DAILY	CUM		1			1	·	EXTERNAL	INTERNAL			TOP	BOTTOM	
ITEM	COSTS	COSTS		SIZE	WEIGHT	GRADE .	CONN	DRIPTID	COLLAPSE	YIELD	CAPACITY	LENGTH	SET AT	SET AT	
	(\$)	(5)							(psi)	(psi)	(bbis/ft)	(ft)	(1)	(fi KB)	
ang Qirs	\$ 315	\$ 2,580		30"	NA	NA						40.00	0.00	40.00	
Tank	\$ 45	\$ 350		13 3/8"	54.5	J55	ST&C	12.459	1,130	2,730	0.15450	500.00	2.00	498.00	
irts	\$ 60	\$ 480											 -		
ajohn	\$ 20	\$ 160									1	L			
Trailer	\$ 50	\$ 400					,		оттомно	I F ASSE	MRIY	31			18.4
Cleaner	\$ 375	\$ 3,000 \$ 800				Tarrier de		1	31 (OM)	MAXIMUM	MINIMUM				Anna Gara
	\$ 100 \$ 90	\$ 800 \$ 720				1		THRE	AD SIZE	0 D.	I.D.	LENGTH		HRS SINCE	
doller nud clor	\$ 90	\$ 375	DF.	SCRIPTION OF	BHA	PROV	/IDER	вох	PIN	(In)	(n)	(ft)	HOURS RUN	INSPECTION	
collars	\$ 196	\$ 3,801	J	Bit			urity		6 5/8 R	12.250		1.25			
k Sub	\$ 250	\$ 1,750	7/8 Lob	e 4 Stage M	ud Motor		DI	6 5/8 R	6 5/8 R	8.000		29.52	ļ		
				Float Sub		s	DI	6 5/8 R	6 5/8 R	8.000	3.000	3.02			
				riffith Shock			idle	6 5/8 R	6 5/8 R	8.000	2.688	11.99	ļ		
				Ionel Drill Co			DI	6 5/8 R	6 5/8 R	8.000	3.250	30.58	ļ		
			Hang	Off Sub & C	Sap Sub	+	DI	6 5/8R	6 5/8 R	7.750	3.750	3.94	 		
				XO			D1	6 5/8 H90	6 5/8 R	8.000	3,250	2,35			
			7.	7 3/4" Drill C	ollars		ig	6 5/8 H90	6 5/8 H90	7.750	2.250	340.02	 		
				6 1/2 Drill C	Collage		DI	4 1/2 XH 4 1/2 XH	6 5/8 H90 4 1/2 XH	7.750 6.500	2.625 2.250	2.35 309.53	-		
OTALS	\$ 1,501	\$ 14,416	10 -	0 1/2 DAII C	Ollars		ig			3.300	1 2.230	, 200.00			
4	T-1	Section 1			<u> </u>			G MUD R		10.000	3.1 - 13		- 1777		
AMPLE		MUD	FUNNEL			GEL	FILTRATE		CAKE	15/50	SAND		1		
DEPTH	TIME	WT.	VISCOSITY	PV/YP	KCL	STRENGTH (Ib/100 RZ)	API (ml/30 min)	CALCIUM	THICKNESS (/32 in)	SOLIDS (% vol)	CONTENT (% vol)	pН	CHLORIDES (ppm)	ALKALINITY Pf/Mf	LCM lb/gal
(R)	(hh:mm)	(ppg)	(sec/qt)	6 / 19	1,90	6 / 13	16.0	(ppm) 20	2	6.0	1/4	10.5	8,000	0.7/3	
1,777	09:00	9.20	36	0 / 13	1,30	0713	10.0	20		0.0		10.0	1		
				t											
									ON VENITOR	V 2000	100000000000000000000000000000000000000				eks maaagamaa k
			- M - 120 H - 120 H	1		DA	ILY MUD	COSIKI	NVENTOR	¥, 1 1000.00.00.00.00.00.00.00.00.00.00.00.00	Kara S	I .	1		TOTAL
			BARITE	OUICK GEL	CAUSTIC	LIME	SODA ASH	UNIDRILL	SOLKWICK	PACR	PHPA	CEDAR	TRUCKING		COSTS
		<u></u>	(sx)	(ex)	(#X)	(\$X.)	(EX)	(sx)	(8×)	(sx)	(gar)	(sx)	(5)		
rcost													\\\\\\\		
RTING INVE	ENTORY		120								ļ		<i>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</i>		
ENTORY RE	CEIVED			1		ļ	ļ					-	WARRANTA		
ED LAST 24 H				+			-					-			
NEW DAK				+	····		-	 							
LY MUD COS	IST MULATIVE COST	,					<u> </u>	 				1			
MULATIVE M		-		 											
							1445.4.6	OOED D	POOT				T BEST WAY		transition and the
				TV/AI	RATE	OF PENETRATI		GGER R	SHOW GAS DA	TA .	1	<u> </u>	13,500		
				TVAL.		DURING	AFTER	BEFORE	DURING	AFTER	Formation 1	Tops:			
	GAS DATA (in L	nits) TRIP	SHOW INTE	TO	BEFORE										
MUD BACK ROUND				70 (R)	BEFORE (R)	(R)	(R)	UNITS	UNITS	UNITS					
BACK	CONN	TRIP	FROM	d distribution in		(ft)	(R)	UNITS	UNITS	UNITS	Sample per				
BACK	CONN	TRIP	FROM	d distribution in		(R)	(R)	UNITS	UNITS	UNITS	Sample per				
BACK	CONN	TRIP	FROM	d distribution in		(R)	(4)	UNITS	UNITS	UNITS					
BACK	CONN	TRIP	FROM	d distribution in		(8)	(A) (B)	UNITS	UNITS	UNITS					
BACK	CONN	TRIP	FROM	d distribution in						UNITS					
BACK ROUND	CONN GAS	TRIP GAS	FROM (R)	(8)	(6)		DEVIAT	ION SUI	RVEYS		Sample Desci	ription:	Davision	Azimuth	DL Angi-
BACK: ROUND	GAS Deviation	TRIP GAS Azimuth	FROM	(t) Depth	(k)	Azimuth.		ION SUI					Deviation	Azimuth	DL Angle
BACK ROUND Depth 538	CONN GAS	TRIP GAS	FROM (ft)	(8)	(6)		DEVIAT DL Angle	ION SUI	RVEYS		Sample Desci	ription:	Deviation	Azimuth	DLAngie
Pepth 538 566	CONN GAS Deviation 1.03	Azimuth	FROM (ft)	Depth 1407	Deviation 0.69	Azimuth 190.80	DEVIAT	ION SUI	RVEYS		Sample Desci	ription:	Daviation	Azimuth	DL Angle
epth 538 566 602	Deviation 1.03 1.22	Azimuth 184.79 189.53	PROM (N) DL Angle 0.19 0.76 0.17 0.21	Depth 1407 1438	Deviation 0.69 0.75	Azimuth 190.80 190.50	DEVIAT DL Angle 1.35 0.39	ION SUI	RVEYS		Sample Desci	ription:	Deviation	Azimuth	DL Angle
Depth 538 566 602 633	Deviation 1.03 1.22 1.20	Azimuth 184.79 189.53 186.87	PL Angle 0.19 0.76 0.17 0.21	Depth 1407 1438 1488 1499	Deviation 0.69 0.75 0.73 0.84 0.51	Azimuth 190.80 190.50 201.30 218.50 206.70	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08	ION SUI	RVEYS		Sample Desci	ription:	Deviation	Azimuth	DL Angie
Pepth 538 566 602 633 664 695	Deviation 1.03 1.22 1.20 1.25 1.34 1.26	Azimuth 184.79 189.53 186.87 188.91 180.49 180.29	DL Angle 0.19 0.76 0.17 0.21 0.88 0.26	Depth 1407 1438 1468 1499 1532 1563	Deviation 0.69 0.75 0.73 0.84 0.51 0.83	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13	ION SUI	RVEYS		Sample Desci	ription:	Deviation	Azimuth	DL Angle
Pepth 538 566 602 633 664 695 727	Deviation 1.03 1.22 1.20 1.25 1.34 1.26 1.32	Azimuth 184 79 186.53 186.57 188.91 150.49 175.88	DL Angle 0.19 0.76 0.17 0.21 0.88 0.36	Depth 1407 1438 1468 1499 1563 1595	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.82	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29	ION SUI	RVEYS		Sample Desci	ription:	Deviation	Azimuth	DLAngle
Septh 538 566 602 633 664 6695 727 757	Deviation 1.03 1.22 1.20 1.25 1.34 1.26 1.32 1.34	Azimuth 184.79 189.53 186.87 188.91 180.49 180.29 180.29 165.88 164.40	PL Angle 0.19 0.76 0.17 0.21 0.88 0.26 0.36 0.89	Depth 1407 1438 1468 1499 1532 1563 1595 1626	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81	Azimuth 190.50 190.50 201.30 218.50 206.70 194.00 187.82 196.70	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43	ION SUI	RVEYS		Sample Desci	ription:	Deviation	Azimuth	DL Angle
Pepth 538 566 602 633 664 695 727 757 787	Deviation 1.03 1.22 1.20 1.26 1.34 1.34 1.33	Azimuth 184.79 189.53 186.87 188.91 150.49 180.29 175.88 184.40 162.92	DL Angle 0.19 0.76 0.17 0.21 0.26 0.36 0.26 0.36 0.49 0.12	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657	Deviation 0.89 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.82 196.70 202.10	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29	ION SUI	RVEYS		Sample Desci	ription:	Deviation.	Azimuth	DLAngle
Depth 538 566 602 633 664 695 727 757 787 817	Deviation 1.03 1.22 1.20 1.25 1.34 1.33 1.46	Azimuth 184 79 189.53 186.87 188.91 150.49 175.88 164.40 162.92 156.82	DL Angle 0.19 0.17 0.21 0.66 0.36 0.36 0.36 0.89 0.12 0.68	Depth 1407 1438 1468 1499 1592 1563 1595 1626 1657 1688	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.82 196.70 202.10	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65	ION SUI	RVEYS		Sample Desci	ription:	Deviation	Azimuth	DL Angle
Pepth 538 566 602 633 664 695 727 757 787 817 844	Deviation 1.03 1.22 1.20 1.34 1.33 1.44 1.43	Azimuth 184.79 189.53 186.87 189.91 150.49 150.29 175.88 164.40 162.92 143.19	DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.68 1.29	Cepth 1407 1433 1468 1499 1532 1563 1595 1626 1657 1688 1720	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.82 196.70 202.10 202.10 179.00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23	ION SUI	RVEYS		Sample Desci	ription:	Deviation	Azimuth	DL Angle
Pepth 538 566 602 633 664 695 727 757 787 817 844 876	Deviation 1.03 1.22 1.20 1.26 1.34 1.28 1.32 1.34 1.33 1.48 1.43 0.64	Azimuth 184 79 189.53 186 87 183.91 180.29 175.88 164.40 162.92 156.82 143.19 137.08	DL Angle 0.19 0.76 0.17 0.21 0.88 0.26 0.36 0.49 0.12 0.68 1.29	Copth 1407 1438 1488 1499 1532 1563 1563 1626 1685 1720 1751	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84	Azimuth 190.80 190.50 201.30 216.50 206.70 194.00 187.82 196.70 202.10 202.10 179.00 157.60	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04	ION SUI	RVEYS		Sample Desci	ription:	Deviation	Azimuth	DLAngle
Pepth 538 566 602 633 664 695 727 757 817 817 844 846 907	Deviation 1.03 1.22 1.20 1.25 1.34 1.28 1.32 1.34 1.48 1.43 0.44 0.71	Azimuth 184 79 189.53 186.87 188.91 180.29 175.88 164.40 162.92 156.82 143.19 137.06	DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.68 1.29	Cepth 1407 1433 1468 1499 1532 1563 1595 1626 1657 1688 1720	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.82 196.70 202.10 202.10 179.00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23	ION SUI	RVEYS		Sample Desci	ription:	Deviation	Azimuth	DLAngle
Depth 538 566 602 633 664 695 727 757 787 817 844 876 907 936	Deviation 1.03 1.22 1.20 1.34 1.33 1.44 1.43 0.84 0.71 0.88	Azimuth 184.79 189.53 186.87 188.91 150.49 150.29 175.88 164.40 162.92 143.19 137.08 130.59 112.85	DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51	Copth 1407 1438 1488 1499 1532 1563 1563 1626 1685 1720 1751	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84	Azimuth 190.80 190.50 201.30 216.50 206.70 194.00 187.82 196.70 202.10 202.10 179.00 157.60	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04	ION SUI	RVEYS		Sample Desci	ription:	Deviation	Azimuth	DLAngle
Pepth 538 566 602 633 664 695 727 757 787 817 844 876 907 936 971	Deviation 1.03 1.22 1.20 1.25 1.34 1.28 1.32 1.33 1.48 1.43 0.84 0.71 0.88 0.50	Azimuth 184.79 189.53 186.87 188.91 180.29 175.88 164.40 162.92 156.82 143.19 137.08 130.59 112.85	DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.39 0.12 0.68 1.29 1.88 0.51	Copth 1407 1438 1488 1499 1532 1563 1563 1626 1685 1720 1751	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84	Azimuth 190.80 190.50 201.30 216.50 206.70 194.00 187.82 196.70 202.10 202.10 179.00 157.60	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04	ION SUI	RVEYS		Sample Desci	ription:	Deviation	Azimuth	DL Angle
Nound (Nound (No	Deviation 1.03 1.22 1.20 1.34 1.33 1.44 1.43 0.84 0.71 0.88	Azimuth 184.79 189.53 186.87 189.91 150.49 150.29 175.88 164.40 162.92 143.19 137.08 130.59 112.85	PL Angle 0.19 0.76 0.17 0.21 0.88 0.26 0.36 0.49 0.12 0.68 1.88 0.51 0.95	Copth 1407 1438 1488 1499 1532 1563 1563 1626 1685 1720 1751	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84	Azimuth 190.80 190.50 201.30 216.50 206.70 194.00 187.82 196.70 202.10 202.10 179.00 157.60	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04	ION SUI	RVEYS		Sample Desci	ription:	Deviation	Azimuth	DL Angle
Papth 5338 5566 6602 633 6684 6695 727 757 757 757 757 757 757 757 757 75	Deviation 1.03 1.22 1.20 1.25 1.34 1.26 1.32 1.34 1.48 1.43 0.84 0.71 0.88 0.50 0.91	Azimuth 184 79 189.53 186.87 188.91 190.29 175.88 164.40 162.92 156.82 143.19 130.59 112.85 107.94 109.50	PL Angle 0.19 0.76 0.17 0.21 0.88 0.26 0.36 0.49 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.65 0.62	Copth 1407 1438 1488 1499 1532 1563 1563 1626 1685 1720 1751	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84	Azimuth 190.80 190.50 201.30 216.50 206.70 194.00 187.82 196.70 202.10 202.10 179.00 157.60	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04	ION SUI	RVEYS		Sample Desci	ription:	Deviation	Azimuth	DLAngle
NACK (SUMD) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Deviation 1.03 1.22 1.20 1.34 1.33 1.44 1.43 0.84 0.71 0.88 0.50 0.91 1.00	Azimuth 184.79 189.53 186.87 189.91 150.49 150.49 162.92 175.88 164.40 162.92 143.19 137.08 130.59 112.85 107.94	DL Angle 0.19 0.76 0.17 0.21 0.86 0.26 0.36 0.40 0.53	Copth 1407 1438 1488 1499 1532 1563 1563 1626 1685 1720 1751	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84	Azimuth 190.80 190.50 201.30 216.50 206.70 194.00 187.82 196.70 202.10 202.10 179.00 157.60	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04	ION SUI	RVEYS		Sample Desci	ription:	Deviation	Azimuth	DLAngle
Papth 5538 5566 602 633 664 695 727 737 737 737 7317 817 817 817 997 1008 1008 1008 1009 71128	Deviation 1.03 1.22 1.20 1.25 1.34 1.26 1.32 1.34 1.33 0.84 0.71 0.86 0.50 0.91 1.00 1.04 1.16	Azimuth 184.79 189.53 186.87 189.91 180.49 180.29 175.88 164.40 162.92 175.88 194.40 162.92 112.85 196.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 137.30	DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53	Copth 1407 1438 1488 1499 1532 1563 1563 1626 1685 1720 1751	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84	Azimuth 190.80 190.50 201.30 216.50 206.70 194.00 187.82 196.70 202.10 202.10 179.00 157.60	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04	ION SUI	RVEYS		Sample Desci	ription:	Deviation	Azimuth	DL Angle
538 5566 602 602 603 664 685 695 607 7727 7757 787 1817 8876 6007 9971 1034 1009 1009 1128 1191 1191	Deviation 1.03 1.22 1.20 1.25 1.34 1.33 1.40 0.84 0.71 0.88 0.50 0.91 1.00 1.04 1.18 1.19	Azimuth 184.79 189.53 186.87 188.91 180.29 175.88 164.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51	PL Angle 0.19 0.76 0.17 0.21 0.86 0.26 0.39 0.12 0.63 1.29 1.88 0.51 0.95 1.04 0.85 0.62 0.40 0.53	Copth 1407 1438 1488 1499 1532 1563 1563 1626 1685 1720 1751	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84	Azimuth 190.80 190.50 201.30 216.50 206.70 194.00 187.82 196.70 202.10 202.10 179.00 157.60	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04	ION SUI	RVEYS		Sample Desci	ription:	Deviation	Azimuth	DLAngle
Nocuro Papetth See See See See See See See See See Se	Deviation 1.03 1.22 1.20 1.26 1.34 1.28 1.32 1.34 1.33 1.48 1.33 0.64 0.71 0.86 0.50 0.91 1.00 1.18 1.19 1.101	Azimuth 184.79 189.53 186.87 183.91 180.29 175.88 164.40 182.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30	PL Angle 0.19 0.76 0.17 0.21 0.88 0.28 0.36 0.40 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.62	Copth 1407 1438 1488 1499 1532 1563 1563 1626 1685 1720 1751	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84	Azimuth 190.80 190.50 201.30 216.50 206.70 194.00 187.82 196.70 202.10 202.10 179.00 157.60	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04	ION SUI	RVEYS		Sample Desci	ription:	Deviation	Azimuth	DLAngle
5586 602 602 603 604 605 602 603 603 604 605 602 603 603 604 605 602 603 605 605 605 605 605 605 605 605 605 605	Deviation 1.03 1.22 1.20 1.25 1.34 1.32 1.34 1.33 1.48 1.43 0.84 0.71 0.86 0.50 0.91 1.00 1.04 1.16 1.19 1.01 0.78 0.27	Azimuth 184.79 189.53 186.87 188.91 180.49 180.29 175.88 164.40 162.92 175.88 194.40 162.92 175.80 1	PROM (B) DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.62 1.49 2.30	Copth 1407 1438 1488 1499 1532 1563 1563 1626 1685 1720 1751	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84	Azimuth 190.80 190.50 201.30 216.50 206.70 194.00 187.82 196.70 202.10 202.10 179.00 157.60	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04	ION SUI	RVEYS		Sample Desci	ription:	Deviation	Azimuth	DL Angle
538 5566 602 8695 87727 7727 757 787 8844 876 899 971 10066 10097 1122 11221 1221 1225 1225 3	Deviation 1.03 1.22 1.20 1.25 1.34 1.28 1.32 1.33 1.48 0.84 0.71 0.88 0.50 0.91 1.00 1.04 1.16 1.16 1.16 1.17 0.76 0.27	Azimuth 184.79 189.53 186.87 188.91 180.29 175.88 164.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57 132.57 137.30 141.51 165.70 235.75	PL Angle 0.19 0.76 0.17 0.21 0.86 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.82 1.48 2.30 0.51	Copth 1407 1438 1488 1499 1532 1563 1563 1626 1685 1720 1751	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84	Azimuth 190.80 190.50 201.30 216.50 206.70 194.00 187.82 196.70 202.10 202.10 179.00 157.60	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04	ION SUI	RVEYS		Sample Desci	ription:	Deviation	Azimuth	DLAngle
NACK NOUND NO NO NO NO NO NO NO NO NO NO NO NO NO	Deviation 1.03 1.22 1.20 1.25 1.34 1.26 1.32 1.33 1.48 1.33 1.49 0.71 1.00 1.16 1.19 1.00 1.16 1.19 0.76 0.27 0.30 0.35	Azimuth 184.79 189.53 186.87 183.91 180.29 175.88 164.40 162.92 156.82 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75 203.90 173.03	PROM (N) DL Angle 0.19 0.76 0.17 0.21 0.88 0.28 0.36 0.89 0.12 0.88 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.82 1.48 2.30 0.51 0.55	Copth 1407 1438 1488 1499 1532 1563 1563 1626 1685 1720 1751	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84	Azimuth 190.80 190.50 201.30 216.50 206.70 194.00 187.82 196.70 202.10 202.10 179.00 157.60	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04	ION SUI	RVEYS		Sample Desci	ription:	Deviation	Azimuth	DLAngle
80000000000000000000000000000000000000	Deviation 1.03 1.22 1.20 1.25 1.34 1.32 1.34 1.33 1.48 1.43 0.84 0.71 0.86 0.50 0.91 1.00 1.04 1.16 1.19 1.01 0.78 0.27 0.33 0.34	Azimuth 184.79 189.53 186.87 189.13 180.49 180.29 175.88 164.40 162.92 175.88 194.40 162.92 175.89 175.80 1	PROM (B) DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.83 0.82 1.48 2.30 0.51 0.58	Copth 1407 1438 1488 1499 1532 1563 1563 1626 1685 1720 1751	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84	Azimuth 190.80 190.50 201.30 216.50 206.70 194.00 187.82 196.70 202.10 202.10 179.00 157.60	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04	ION SUI	RVEYS		Sample Desci	ription:	Deviation	Azimuth	DL Angle
NACK (OUND) 538 5586 602 602 603 664 685 687 7727 7757 787 787 787 787 787 787 787 117 817 1034 1099 1099 1191 1129 1191 1129 1193 1191 1129 1193 1191 1193 1193	Deviation 1.03 1.22 1.20 1.25 1.34 1.33 1.40 0.84 0.71 1.08 0.85 0.50 0.91 1.00 1.04 1.16 1.19 0.76 0.27 0.30 0.35 0.44 0.50	Azimuth 184.79 189.53 186.87 188.91 180.29 175.88 164.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 185.70 235.75 203.90 173.03 172.10 163.30	PROM (N) DL Angle 0.19 0.76 0.17 0.21 0.88 0.28 0.36 0.89 0.12 0.88 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.82 1.48 2.30 0.51 0.55	Copth 1407 1438 1488 1499 1532 1563 1563 1626 1685 1720 1751	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84	Azimuth 190.80 190.50 201.30 216.50 206.70 194.00 187.82 196.70 202.10 202.10 179.00 157.60	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04	ION SUI	RVEYS		Sample Desci	ription:	Deviation	Azimuth	DL Angle
SACK KOLKD Papth 5538 5566 602 333 684 695 777 778 718 717 844 697 907 907 907 907 1012 1012 1012 1012 1012 1012 1013 1	Deviation 1.03 1.22 1.20 1.25 1.34 1.26 1.32 1.34 1.39 1.48 1.43 0.84 1.43 0.81 1.49 0.71 0.88 0.50 0.50 1.00 1.00 1.00 1.00 1.00 1.00	Azimuth 184 79 189 53 186 87 189 91 180 49 180 29 175 88 164 40 162 92 175 87 175 97 1	PROM (B) DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.83 0.82 1.48 2.30 0.51 0.58	Copth 1407 1438 1488 1499 1532 1563 1563 1626 1685 1720 1751	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84	Azimuth 190.80 190.50 201.30 216.50 206.70 194.00 187.82 196.70 202.10 202.10 179.00 157.60	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04	ION SUI	RVEYS		Sample Desci	ription:	Deviation	Azimuth	DLAngle
SACK KOLKD Papth 5538 5566 602 333 684 695 777 778 718 717 844 697 907 907 907 907 1012 1012 1012 1012 1012 1012 1013 1	Deviation 1.03 1.22 1.20 1.25 1.34 1.33 1.40 0.84 0.71 1.08 0.85 0.50 0.91 1.00 1.04 1.16 1.19 0.76 0.27 0.30 0.35 0.44 0.50	Azimuth 184 79 189 53 186 87 189 91 180 49 180 29 175 88 164 40 162 92 175 87 175 97 1	PROM (B) DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.83 0.82 1.48 2.30 0.51 0.58	Copth 1407 1438 1488 1499 1532 1563 1563 1626 1685 1720 1751	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84	Azimuth 190.80 190.50 201.30 216.50 206.70 194.00 187.82 196.70 202.10 202.10 179.00 157.60	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04	ION SUI	RVEYS		Sample Desci	ription:	Deviation	Azimuth	DLAngle
RACK ROUND Papth 538 556 602 333 664 695 787 787 787 787 787 787 787 7	Deviation 1.03 1.22 1.20 1.25 1.34 1.26 1.32 1.34 1.39 1.48 1.43 0.84 1.43 0.81 1.49 0.71 0.88 0.50 0.50 1.00 1.00 1.00 1.00 1.00 1.00	Azimuth 184 79 189 53 186 87 189 91 180 49 180 29 175 88 164 40 162 92 175 87 175 97 1	PROM (B) DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.83 0.82 1.48 2.30 0.51 0.58	Copth 1407 1438 1488 1499 1532 1563 1563 1626 1685 1720 1751	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.82 196.70 202.10 202.10 179.00 164.00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 0.43	ION SUI	RVEYS Deviation	Azimuth	Sample Desci	ription:	Deviation	Azimuth	DL Angle
RACK ROUND Papth 538 556 602 333 664 695 787 787 787 787 787 787 787 7	Deviation 1.03 1.22 1.20 1.25 1.34 1.26 1.32 1.34 1.39 1.48 1.43 0.84 1.43 0.81 1.49 0.71 0.88 0.50 0.50 1.00 1.00 1.00 1.00 1.00 1.00	Azimuth 184 79 189 53 186 87 189 91 180 49 180 29 175 88 164 40 162 92 175 87 175 97 1	PROM (B) DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.83 0.82 1.48 2.30 0.51 0.58	Copth 1407 1438 1488 1499 1532 1563 1563 1626 1685 1720 1751	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.82 196.70 202.10 202.10 179.00 164.00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 0.43	ION SUI	RVEYS	Azimuth	Sample Desci	Depth	Deviation	Azimuth	
NACK NOUND N	Deviation 1.03 1.22 1.20 1.25 1.34 1.28 1.33 1.40 0.84 0.71 1.03 0.84 0.71 1.00 0.76 0.91 1.00 0.76 0.91 1.00 0.76 0.97 0.76 0.97 0.77 0.78 0.78	Azimuth 184.79 189.53 186.87 188.91 180.29 175.88 164.40 162.92 156.82 1143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75 203.90 173.03 172.10 163.30 172.10	PROM (N) DL Angle 0.19 0.76 0.17 0.21 0.88 0.26 0.39 0.12 0.68 1.29 1.88 0.51 1.04 0.85 0.62 0.40 0.53 0.33 0.62 1.48 2.30 0.51 0.58 0.28 0.30	Cepth 1407 1438 1488 1499 1552 1563 1595 1688 1720 17251 1782	Deviation 0.69 0.75 0.73 0.84 0.51 0.63 0.85 1.20 1.00 0.88 0.84 0.93	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.82 196.70 202.10 202.10 179.00 164.00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 0.43	RCULAT PLANE LUMETRIC DATE OF THE PLANE PL	RVEYS Deviation	Azimuth Care Care Standpipe	DL Angle.	Depth LS H#P	DP DP	ANNIAR VE DC	OGIY OC
BACK ACUAD STANDARD S	Deviation 1.03 1.22 1.20 1.25 1.34 1.28 1.32 1.34 1.33 1.48 1.43 0.84 0.71 0.86 0.50 0.91 1.00 1.04 1.16 1.19 1.01 0.78 0.27 0.30 0.35 0.44 0.50 0.44 0.50	TRIP GAS Azimuth 184 79 189.53 186.87 188.91 180.49 180.29 175.88 164.40 162.92 175.88 164.40 162.92 175.89 175.80	PROM (B) DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.68 1.29 1.85 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.62 1.44 2.30 0.51 0.55 0.52 0.40 0.53 0.33 0.62 0.40 0.53 0.33 0.62 0.40 0.53 0.33 0.62 0.51 0.55 0.62 0.40 0.55 0.55 0.55 0.55 0.55 0.55 0.55	Depth 1407 1407 1438 1499 1532 1595 1626 1657 1688 1720 1751 1782	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.61 1.20 1.00 0.88 0.84 0.93	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 167.82 196.70 202.10 202.10 179.00 157.60 164.00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.12 0.65 1.23 1.04 0.43	RCULAT PLANE	RVEYS Deviation ING DATA (gafmin)	Azimuth Care Care Standappe (pa)	DL Angle CLATING DETA Motor Offerents	Depth Depth Depth	DP ((kmin)	ANNULAR VEL DC (Virnin)	OCITY DC ((Year)
NACK NOUND Papth 538 556 602 602 603 664 695 7727 757 787 817 844 816 817 817 817 817 817 817 817	Deviation 1.03 1.22 1.20 1.25 1.34 1.28 1.33 1.40 0.84 0.71 1.03 0.84 0.71 1.00 0.76 0.91 1.00 0.76 0.91 1.00 0.76 0.97 0.76 0.97 0.77 0.78 0.78	Azimuth 184.79 189.53 186.87 188.91 180.29 175.88 164.40 162.92 156.82 1143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75 203.90 173.03 172.10 163.30 172.10	PROM (N) DL Angle 0.19 0.76 0.17 0.21 0.88 0.26 0.39 0.12 0.68 1.29 1.88 0.51 1.04 0.85 0.62 0.40 0.53 0.33 0.62 1.48 2.30 0.51 0.58 0.28 0.30	Cepth 1407 1438 1488 1499 1552 1563 1595 1688 1720 17251 1782	Deviation 0.69 0.75 0.73 0.84 0.51 0.63 0.85 1.20 1.00 0.88 0.84 0.93	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.82 196.70 202.10 202.10 179.00 164.00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 0.43	RCULAT PLANE LUMETRIC DATE OF THE PLANE PL	RVEYS Deviation	Azimuth Care Care Standpipe	DL Angle.	Depth LS H#P	DP DP	ANNIAR VE DC	OGIY OC
SAGE NOUND STATE OF THE STATE O	Deviation 1.03 1.22 1.20 1.25 1.34 1.28 1.32 1.34 1.33 1.48 1.43 0.84 0.71 0.86 0.50 0.91 1.00 1.04 1.16 1.19 1.01 0.78 0.27 0.30 0.35 0.44 0.50 0.44 0.50	TRIP GAS Azimuth 184 79 189.53 186.87 188.91 180.49 180.29 175.88 164.40 162.92 175.88 164.40 162.92 175.89 175.80	PROM (B) DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.68 1.29 1.85 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.62 1.44 2.30 0.51 0.55 0.52 0.40 0.53 0.33 0.62 0.40 0.53 0.33 0.62 0.40 0.53 0.33 0.62 0.51 0.55 0.62 0.40 0.55 0.55 0.55 0.55 0.55 0.55 0.55	Depth 1407 1407 1438 1499 1532 1595 1626 1657 1688 1720 1751 1782	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.61 1.20 1.00 0.88 0.84 0.93	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 167.82 196.70 202.10 202.10 179.00 157.60 164.00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.12 0.65 1.23 1.04 0.43	RCULAT PLANE	RVEYS Deviation ING DATA (gafmin)	Azimuth Care Care Standappe (pa)	DL Angle CLATING DETA Motor Offerents	Depth Depth Depth	DP ((kmin)	ANNULAR VEL DC (Virnin)	OCITY DC ((Year)

WELLNAME		
Jensen 1-18 43-0	101-3	0718
LOCATION DATA		
NW NW Sec 16 T-12S,	R-10E	
FOOTAGES	GL	КВ
1380 560-FNL 500 FWL	7569	7580

ELEGREEN OPERATING, INC.

RIG CONTACT IN	FORMATION:
OFFICE TRAILER / FAX:	970 942 7543
OFFICE TRAILER / FAX: CONSULTANT HAND CELL:	303 913 1054
DOGHOUSE:	307 258 7315
PUSHER:	

DATE SPUD DATE	6AM DEPTH
8/24/2004 8/16/2004	1859
REPORT NO.	24 HR FOOTAGE
8	159
DRLG CONTRACTOR	DAYS SINCE SPUD
Elenburg, Rig 12	8
CONSULTANT	AFE# API#
John C. Lamb	43-007-30718

CF	IRONOLO	GY OF DAIL	Y OPERATIONS (06:00 - 06:00 HRS)	SLOW	PUMP RA	TE DATA:			G WEIGHT INFO	
	то	HOURS		Depth	SPM	Pressure	Eff BHA Wt	Rotating:	Slackoff:	Hoisting:
ROM (hrs)	(hrs)	(hrs)	Activity:	1713	54	250	43,000	90,000	88,000	92,000
06:00	10:45	4.75	Rotate 1740 - 1793					-		***
10:45	11:45	1.00	Rig service and ream tight connection							
11:45	12:15	0.50	Rotate 1793 - 1799				-			
12:15	17:00	4.75	Trip out of hole, few sticky spots up to 1400'							
17:00	20:30	3.50	Lower mast and respot rig over wellhead							
20:30	00:15	3.75	Trip in hole							
00:15	01:45	1.50	Wash and ream 1400 - 1799							
01:45	06:00	4.25	Rotate 1799 - 1859							
				_	***					
	<u> </u>									
				.				····		
									·	
						·	··		RECI	FIVED
									DEC 1	3 2004
	-									
								Di	V. OF OIL. (BAS & MINING
	-									
	 									
TOTAL	HOURS	24.00								

	DAILY	CUM
DESC.	(hrs)	(hrs)
Drill		97.50
Trip		13.75
Circulate		0.75
Rig Repair		22.00
Rig Service		2.25
Dev Survey		
NU / ND		8.50
Cement		
Run Casing		
woc		
OH Logging		
Mix Mud		
MI & RU		6.00
Rat Hole		Ī
Mouse Hole		
Fishing		
Other		0.50
Coring		
Inspect BHA		
Cut drig line		
Wash & Ream		
Drift Cement		6.25
TestBOPE		1.50
woo		
PU/LD BHA		7.00
insp circ equip		3.50
TOTALS	0.00	169.50

			W	DAILY		CUM		AFE	
COST CODE	DESCRIPTION OF DAILY COSTS			(\$)		(\$)		(\$)	
2030.010	Land, Legal, Title, Survey, Arch, Damages, Permits, Signs								
2030.031	Dirtwork, Road, Location, Pits, Liner								
2030.019	Contract Drilling 9480 / day 392.5 / h cond 5071 26,000 mob sf	c 36791	\$	9,480	\$	140,792			
2032.001	Water				\$	1,971			
2032.013	Drill Bits, Stabilizers, Reamers		\$	12,000	\$	24,000			
2031.046	Cementing and Services				\$	5,000			
2030.053	Coring and Analysis								
2030.052	Logging								
2030.054	Mud Logging								
2030.037	Rental Equipment		\$	1,501	\$	14,416			
2030.028	Transportation				\$	8,362			
2032.004	Mud and Chemicals		\$	505	\$	10,125			
	Directional Services, Mud Motors		\$	6,234	\$	47,338			
	Intermediate casing								
2030.035	Contract Labor				\$_	2,920			
2030.022	Engineering / Supervision		\$	800	\$	6,400			
2030.099	Intangible Miscellaneous and Contingencies								
2040.001	Surface Casing				\$	17,790			
2040.004	Production Casing								
1011.000	Float Equipment, Shoes, Centralizers								
1041.000	Wellhead Equipment				\$	4,941			
1073.000	Bottom Hole Pump / Gas Lift / Other				L				
1104.000	Drivehead, Engine / Motor and Hydraulic Pump / Electric Unit				ļ				
2040.052 / 2040.055	Valves and Fittings, Small / Large								
2040.067	Other Surface Equipment								
2040.099	Tangible Miscellaneous and Contingencies								
	TOTAL COS	STS	s	30,520	\$	284,055	s		

.eport#	8	Date:	08/24/04		DA	ILY DR	ILLING		RT						Page 2
			Well Na	me:		Je		RECOR							Ep
	BNY	r -			. ——	DEPTH	DEPTH	FOOTAGE	CUM BIT				BIT	BIT	RADING
BIT NO.	SIZE			SERIAL	JETS	IN	оит	DAILLED	HOURS	ROP	WOB	RPM	TORQUE	In Day Dull has Si	als Gge Dull Other
(P)	(In)	MFG	TYPE	NO.	(32/32/32)	(A)	(t t)	(ft)	(hrs)	(fVhr) 12.7	36 - 43	MTR/TBL 45 / 60	(R - Hos) 2100 - 2900	6 7 WT ALL	
1	12 1/4	Security	XL 18N		14 / 14 / 14 / 11	494 1,799	1,799	1,305 61	102.75 4.25	14.4	38 - 40	45 / 60	1500 - 2500		
2	12 1/4	Security	XL43	10408516	18 / 18 / 18	1,799	1,000	0		#DIV/0!					
			 -					0		#DIV/0!					
			 					0_		#DIV/0!	ļ				
								0		#DIV/0!					
								0		#DIV/0!	Ь		L		
COM	MENTS	<u> </u>								CASING E	NTX.				
RENT	AL EQUIP	MENT				,				INTERNAL	T		TOP	BOTTOM	
RENTAL	DAILY	CUM					CONN	DRIPT ID	COLLAPSE	YIELD	CAPACITY	LENGTH	SET AT	SETAT	
ITEM	COSTS	COSTS		SIZE	WEIGHT	GRADE	CONN	CANTITO	(psi)	(p≰i)	(bbls/ft)	(A)	(ft)	(AKB)	<u></u>
<u> </u>	\$ 315	\$ 2,580		30*	NA	NA						40.00	0.00	40.00	
Living Otrs rac Tank	\$ 315 \$ 45			13 3/8*	54.5	J55	ST&C	12.459	1,130	2,730	0.15450	500.00	2.00	498.00	
orklift	\$ 60										 				
Portajohn	\$ 20	\$ 160				<u> </u>						L		L	
Mud Trailer	\$ 50							B	оттомно	LE ASSEN	MBLY			- 1	
Mud Cleaner	\$ 375			100		T				MAXIMUM	MINIMUM				
DR	\$ 100 \$ 90	\$ 800 \$ 720						THRE	O SIZE	0.D.	I.D.	LENGTH	Garage Control	HRS SINCE	
Autodniller RU mud cinr	\$ 90	\$ 375	DE	SCRIPTION OF	ВНА	PROV	// DER	вох	PIN	(in)	(In)	(ft)	HOURS RUN	INSPECTION	
Drill collans	\$ 196			Bit		Sec	urity		6 5/8 R	12.250	 	1.25	ļ	 	
Shock Sub	\$ 250	\$ 1,750	7/8 Lot	e 4 Stage M	lud Motor		DI	6 5/8 R	6 5/8 R	8.000	0.000	29.52			
other				Float Sub		-	DI .	6 5/8 R	6 5/8 R 6 5/8 R	8.000 8.000	3.000 2.688	3.02 11.99		 	
other	 	ļ		riffith Shock Aonel Drill C			idle DI	6 5/8 R 6 5/8 R	6 5/8 R	8.000	3,250	30.58			
other		 		Off Sub & C			DI	6 5/8R	6 5/8 R	7.750	3.750	8.94			
other	 	 	Hang	XO_			DI	6 5/8 H90	6 5/8 R	8.000	3.250	2.35		 -	
other other	 		7-	7 3/4° Drill C	ollars	 	ig	6 5/8 H90	6 5/8 H90	7.750	2.250	340.02	ļ <u> </u>	 	
other				хо		s	DI	4 1/2 XH	6 5/8 H90	7.750	2.625	2.35 309.53	<u> </u>	 	
TOTALS	\$ 1,501	\$ 14,416	10	- 6 1/2 Drill (Collars		ig	4 1/2 XH	4 1/2 XH	6.500	2.250	309.53			
		18	inger die	440.	<u> </u>			G MUD R						<u> </u>	
SAMPLE		MUD	FUNNEL			GEL	FILTRATE		CAKE	SOUDS	SAND	рН	CHLORIDES	ALKALINITY	LCM
DEPTH	TIME	WT.	VISCOSITY	PV/YP	(%)	STRENGTH (Ib/100 ft2)	(ml/30 min)	CALCIUM (ppm)	THICKNESS (/32 in)	(% vol)	(% vol)		(ppm)	Pt/Mf	lb/gal_
(R) 1,777	(hh:mm) 09:00	(ppg) 9.20	(sec/qt) 36	6 / 19	1.90	6 / 13	16.0	20	2	6.0	1/4	10.5	8,000	0.7/3	
1,111	03.00	0.20	72											l . — — — — — — — — — — — — — — — — — —	
						1	L	<u> </u>			<u> </u>			<u> </u>	
Table . ""	rus Pray	718. 31		1000000	0.000	DA	ILY MUD	COST & I	NVENTOR	Υ			10.000		
				Telesco		F	arg. 1				PHPA	CEDAR	TRUCKING		TOTAL COSTS
			BARITE	QUICK GEL	CAUSTIC (#x.)	LIME (ex)	SODA ASH	UNIDRILL (SX.)	SOLKWICK	PAC-R (sx)	(gal)	(sx)	(5)		(\$)
UNIT COST	9,5,6,7,50,0,1,1		(\$X.)	100	120	1									
STARTING IM	ENTORY		120								ļ <u> </u>	ļ —			
INVENTORY R	ECEIVED			_		ļ						 			
USED LAST 2				 							 	 			
DAILY MUD C				1		 									506
	MULATIVE COS	т									ļ	ļ <u>.</u>		ļ	8,500 9,620
CUMULATIVE						J	L	<u> </u>	L	<u> </u>	ــــــــــــــــــــــــــــــــــــــ			L	3,020
dia Pilita	- 1982	MANAGA A	1.788.25	THE A		adolli. X.	MUD LO	OGGER R					1		and and a
MU	D GAS DATA (In		SHOW INT			OF PENETRAT			SHOW GAS DA		Formation	Tons			
BACK	CONN	TRIP GAS	FROM (A)	TO (%)	BEFORE (ft)	DURING (R)	AFTER (ft)	BEFORE	DURING	AFTER UNITS					
GROUND	GAS	9,23				157	1				Sample pe	rcentages:			
											Sample Desc	ription:			
						ļ	 -	 			+				
	l.,	<u> </u>			٠ـــــــــــــــــــــــــــــــــ					l					
280-17 1.2	-15-17-038						DEVIA	ION SU	RVEYS						
	12-22		l era i	1 5.4	Deviation	Azimuth	DL Angle		Deviation	Azímuth	DLAngle	Depth	Deviation	Azimuth	DL Angle
Depth 538	Deviation 1.03	184.79	DL Angle 0.19	Depth 1407	0.69	190.80	1.35								
566	1.03	189.53	0.76	1438	0.75	190.50	0.39				<u> </u>	ļ		 	
602	1.20	186.87	0.17	1468	0.73	201.30	0.47	 			-			 	
633	1,25	188.91	0.21	1499	0.84	218.50	0.83	 	 	 	+	 	 	 	
664	1.34	180.49	0.68	1532 1563	0.51	206.70 194.00	1.08	 					1	 	
695 727	1.26	180.29	0.26	1595	0.85	187.82	0.29	†							
757	1.34	164.40	0.89	1626	0.81	196.70	0.43	l						1	
787	1.33	162.92	0.12	1657	1.20	202.10	1.29	<u> </u>	ļ	ļ	1	 	 	1	
817	1.48	156.82	0.68	1688	1.00	202.10	0.65	 			1	+	 	+	
844	1.43	143.19	1.29	1720	0.88	179.00 157.60	1.23	1	 	 	 	+	 	 	-
876	0.84	137.08	1.88 0.51	1751 1782	0.84	157.60	0.43	 	 		1		1		
907	0.71	112.85	0.95	1,,,,,,	0.33	157.00	1	1							
971	0.50	107.94	1.04	T				1				1		1	
1034	0.91	109.50	0.65				ļ	_	ļ			 		1	
1066	1.00	120.10	0.62			1	 					1		+	
	1.04	126.70	0.40		ļ		-	-		 	+ -	+		+	
1097	1.16	132.57	0.53	+	-	+		 	 	-		 	+	1	
1097 1128	4 40	137.30	0.62		 	1 -	_				1	I			
1097 1128 1159	1.19		1.48	1											
1097 1128 1159 1191	1.19 1.01 0.76	165.70	2.30									1	ļ	 	
1097 1128 1159	1.01	165.70 235.75						<u> </u>				 		 	
1097 1128 1159 1191 1221	1.01 0.76 0.27 0.30	235.75 203.90	0.51		1	-		1		<u> </u>	 				
1097 1128 1159 1191 1221 1252 1283 1314	1.01 0.76 0.27 0.30 0.35	235.75 203.90 173.03	0.51 0.58	-		ļ	 							1	
1097 1128 1159 1191 1221 1252 1283 1314 1346	1.01 0.76 0.27 0.30 0.35 0.44	235.75 203.90 173.03 172.10	0.51 0.58 0.28					I	-	-	-	1	 	+	
1097 1128 1159 1191 1221 1252 1283 1314 1346 1377	1.01 0.76 0.27 0.30 0.35 0.44	235.75 203.90 173.03 172.10 163.30	0.51 0.58									<u> </u>			
1097 1128 1159 1191 1221 1252 1283 1314 1346 1377	1.01 0.76 0.27 0.30 0.35 0.44	235.75 203.90 173.03 172.10 163.30 ON TOPS:	0.51 0.58 0.28					<u> </u>				<u> </u>			
1097 1128 1159 1191 1221 1252 1283 1314 1346 1377	1.01 0.76 0.27 0.30 0.35 0.44 0.50 ATED FORMATIO	235.75 203.90 173.03 172.10 163.30 ON TOPS:	0.51 0.58 0.28				D(IMD o c	IRCUII A3	ING DATA			<u> </u>			
1097 1128 1159 1191 1221 1252 1283 1314 1346 1377	1.01 0.76 0.27 0.30 0.35 0.44 0.50 ATED FORMATIO	235.75 203.90 173.03 172.10 163.30 ON TOPS:	0.51 0.58 0.28 0.30	STROKE	ASSIMED		PUMP & C		ING DATA	· · · · · · · · · · · · · · · · · · ·	RCULATING DET	AILS		ANNUL AR VEL	ocity
1097 1128 1159 1191 1221 1252 1283 1314 1346 1377	1.01 0.76 0.27 0.30 0.35 0.44 0.50 ATED FORMATIO	235.75 203.90 173.03 172.10 163.30 ON TOPS:	0.51 0.58 0.28	STROKE LENGTH	ASSUMED EFF	PUMP RATE	V	PUMP OLUMETRIC D	ATA	CIF Standpipe	RCULATING DET	HMP	DP	DG	DC
1097 1128 1159 1191 1221 1252 1283 1314 1346 1377 ESTIM. SA	1.01 0.76 0.27 0.30 0.35 0.44 0.50 ATED FORMATIC	235.75 203.90 173.03 172.10 163.30 ON TOPS:	0.51 0.58 0.28 0.30	LENGTH (in)	EFF (%)	PUMP RATE (spm)	(bbis'stk)	PUMP OLUMETRIC D (bbls/min)	ATA (gal/min)	Standpipe (psi)	Motor Differential		(fl/min)	DC (N/min)	DC (ftrmin)
1097 1128 1159 1191 1221 1252 1283 1314 1346 1377 ESTIM. SA MUD PUMPS NO. 1	1.01 0.76 0.27 0.30 0.35 0.44 0.50 AYED FORMATIC	235.75 203.90 173.03 172.10 163.30 ON TOPS:	0.51 0.58 0.28 0.30	LENGTH	EFF	PUMP RATE	V	PUMP OLUMETRIC D	ATA	CIF Standpipe	Motor	HMP		DG	DC
1097 1128 1159 1191 1221 1252 1283 1314 1346 1377 ESTIM.	1.01 0.76 0.27 0.30 0.35 0.44 0.50 ATED FORMATIC	235.75 203.90 173.03 172.10 163.30 ON TOPS:	0.51 0.58 0.28 0.30	LENGTH (in)	EFF (%)	PUMP RATE (spm)	(bbis'stk)	PUMP OLUMETRIC D (bbls/min)	ATA (gal/min)	Standpipe (psi)	Motor Differential		(fl/min)	DC (N/min)	DC (ftrmin)

WELL NAME		
Jensen 1-13 43-0	101-3	0718
LOCATION DATA		
NW NW Sec 16 T-12S	, R-10E	
FOOTAGES	GL	кв
1380 845	7569	7580

EVERGREEN OPERATING, INC. DAILY DRILLING REPORT

RIG CONTACT INFORMATION:

OFFICE TRAILER / FAX: 970 942 7543

CONSULTANT HAND CELL: 303 913 1054

DOGHOUSE: 307 258 7315

PUSHER:

DATE SPUD DATE	SAM DEPTH
8/25/2004 8/16/2004	2027
REPORT NO.	24 HR FOOTAGE
9	168
DRLG CONTRACTOR	DAYS SINCE SPUD
Elenburg, Rig 12	9
CONSULTANT	AFE # API #
John C. Lamb	43-007-30718

ACTIVITY AT REPORT TIME:

Drilling ahead

Daily cost | Cum cost | Afe costs |

\$ 19,719 \$ 303,774 \$ -

CH	CHRONOLOGY OF DAILY OPERATIONS (06:00 - 06:00 HRS)					PUMP RA	TE DATA:	STRING WEIGHT INFORMATION:			
ROM	то	HOURS				SPM	Pressure	Eff BHA Wt	Rotating:	Slackoff:	Hoisting:
(hrs)	(hrs)	(hrs)	Activity:		1713	54	275	43,000	94,000	92,000	95,000
06.00	10:45	4.75	Rotate 1859 - 1890								
10:45	11:15	0.50	Service rig								
11:15	02:15	15.00	Rotate 1890 - 1988; at 1895', pe	enetration rate stoppe	d with loss of a	all different	ial pressure, p	umped SAAP a	and soap swe	eps and continu	ed to work bit
			through soft gummy shale that v	was causing balling; R	OP picked bac	ck up by 19	00 and increa	sed further by	1930 and aga	in at 1970'	
03:36	09:36	1.75	Slide 1988 - 1998								
04:00	06:00	2.00	Rotate 1998 - 2027								
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								f.	W ne or	040	
	<u> </u>								AN OF O	L, GAS & M	INING

	DAILY	CUM
DESC.	(hrs)	(hrs)
Drill	23.50	121.00
Trip		13.75
Circulate		0.75
Rig Repair		22.00
Rig Service	0.50	2.75
Dev Survey		
NU / ND		8.50
Cement		
Run Casing		
woc		
OH Logging		
Mix Mud		<u> </u>
MI & RU		6.00
RatHole		
Mouse Hole		
Fishing		
Other		0.50
Coring		
Inspect BHA		
Cut drig line		
Wash & Ream		
Drill Cement		6.25
Test BOPE		1.50
woo		1
PU/LD BHA		7.00
inspicinc equip		3.50
TOTALS	24.00	193.50

			DAILY	La.	CUM	AFE	
COST CODE	DESCRIPTION OF DAILY COSTS		(\$)		(\$)	(\$)	
2030.010	Land, Legal, Title, Survey, Arch, Damages, Permits, Signs			<u> </u>			
2030.031	Dirtwork, Road, Location, Pits, Liner						
2030.019	Contract Drilling 9480 / day 392.5 / h cond 5071 26,000 mot	sfc 36791 \$	9,480	\$	150,272		
2032.001	Water	\$	405	\$	2,376		
2032.013	Drill Bits, Stabilizers, Reamers			\$	24,000		
2031.046	Cementing and Services			\$	5,000		
2030.053	Coring and Analysis		_				
2030.052	Logging			<u> </u>			
2030.054	Mud Logging			<u></u>			
2030.037	Rental Equipment	\$	1,501	\$	15,917		
2030.028	Transportation			\$	8,362		
2032.004	Mud and Chemicals	\$	1,299	\$	11,424		
	Directional Services, Mud Motors	\$	6,234	\$	53,572		
	Intermediate casing						
2030.035	Contract Labor			\$	2,920		
2030.022	Engineering / Supervision	\$	800	\$	7,200		
2030.099	Intangible Miscellaneous and Contingencies						
2040.001	Surface Casing			\$	17,790		
2040.004	Production Casing						
1011.000	Float Equipment, Shoes, Centralizers						
1041.000	Wellhead Equipment			\$	4,941		
1073.000	Bottom Hole Pump / Gas Lift / Other			ļ			
1104.000	Drivehead, Engine / Motor and Hydraulic Pump / Electric Unit						
2040.052 / 2040.055	Valves and Fittings, Small / Large						
2040.067	Other Surface Equipment						
2040.099	Tangible Miscellaneous and Contingencies		.,				
1000-	TOTAL	COSTS S	19,719		303,774	•	

			Well Na	me:		VILY DR	nsen 1-18			_		-			
	1.00		,, an 14a			, market	BI	TRECOR	1			_	7	1	
BIT	BIT					DEPTH	DEPTH	FOOTAGE	CUM BIT				BIT		IT GRADING
NO.	SIZE			SERIAL	JETS	IN IN	OUT	DRILLED	HOURS (hns)	ROP (fl/hr)	WOB (Fre)	RPM MTR/TBL	TORQUE (R - Ibs)	in Out Dull Loc	Seals Gge Dull
1	(In) 12 1/4	MFG Security	XL 18N	754840	(32/32/32) 14 / 14 / 14 / 1	(R) 494	1,799	1,305	102.75	12.7	36 - 43	45 / 60	2100 - 2900	6 7 WT ALL	
2	12 1/4	Security	XL43	10408516		1,799	2,027	228	27.75	8.2	10 - 40	45 / 45-60	1200 - 2000		
				.			-	0		#DIV/0!	ļ		-	ļ	
			_		-			0		#DIV/0!	 				
			 	<u> </u>			-	0		#DIV/0!	1			· · · · · · · · · · · · · · · · · · ·	
-		 	†					0		#DIV/0!	İ				
COMM	ENTS	L													
	AL EQUIP				188		r	1	T'	CASING I	DATA		TOP	BOTTOM	,
RENTAL ITEM	COSTS	COSTS		SIZE	WEIGHT	GRADE	CONN	DRIFTID	EXTERNAL COLLAPSE	YIELD	CAPACITY	LENGTH	SET AT	SET AT	
	(\$)	(5)] 322		U.C.D.	00.00		(psl)	(p#i)	(bbls/ft)	(ft)	(ft)	(R KB)	
ang Qtrs	\$ 315			30"	NA	NA.						40.00	0.00	40.00	
	\$ 45			13 3/8"	54.5	J55	ST&C	12.459	1,130	2,730	0.15450	500.00	2.00	498.00	
	\$ 60 \$ 20					-									
	\$ 50										· · · · · · · · · · · · · · · · · · ·				
					14,7		# 1 TYY	В	оттомно						
	\$ 100	\$ 900	1947							MAXIMUM	MINIMUM				
$\overline{}$	\$ 90	\$ 810					40.00		AD SIZE	0.D.	I.D.	LENGTH (ft)	HOURS RUN	HRS SINCE INSPECTION	
nud cinr collars	\$ 196	\$ 375 \$ 3,997	DES	SCRIPTION OF Bit	OTA .	PRO\ Sec	unity	BOX	6 5/8 R	(In) 12.250	(in)	1.25			
	\$ 250	\$ 2,000	7/8 Lob	e 4 Stage M	lud Motor		DI	6 5/8 R	6 5/8 R	8.000		29.52			
				Float Sub		s	DI	6 5/8 R	6 5/8 R	8.000	3.000	3.02			
		 		iffith Shock			idle	6 5/8 R	6 5/8 R	8.000	2.688	11.99			
-				Off Sub & C			DI DI	6 5/8 R 6 5/8R	6 5/8 R 6 5/8 R	8.000 7.750	3.250 3.750	30.58 8.94			
		-	mang	XO XO			DI	6 5/8 H90	6 5/8 R	8.000	3.250	2.35			
			7 - 1	7 3/4" Drill C	ollars		9	6 5/8 H90	6 5/8 H90	7.750	2.250	340.02			
				хо		s	DI	4 1/2 XH	6 5/8 H90	7.750	2.625	2.35			<u> </u>
OTALS	\$ 1,501	\$ 15,917	10-	6 1/2 Drill C	Collars		g	4 1/2 XH	4 1/2 XH	6.500	2.250	309.53			
					. 10	170		G MUD R		1-6 as 5	T	45-37			7:756 <u>1,74</u>
AMPLE DEPTH	TIME	MUD. WT.	FUNNEL VISCOSITY	PV/YP	ка	GEL STRENGTH	FILTRATE API	CALCIUM	CAKE THICKNESS	SOLID6	CONTENT	ρΗ	CHLORIDES	ALKALINETY	LCM
(8)	(hh:mm)	(PPG)	(s ec/qt)	A 154.1	(%)	(15/100 ft2)	(ml/30 mln)	(ppm)	(/32 ln)	(% vol)	(% vol)	20.00.0000	(ppm)	Pf/Mf	1b/gal
1,885	09:00	9.30	37	7 / 24	2.10	7 / 17	17.5	20	2	7.0	1/4	9.5 10.0	12,000	.4/3.4	
2,025	10:48	9.10	42				13.5		2		<u> </u>	10.0			
		,					II SZ KALIPS	COST 6 1	NVENTOR	V .			80 10 10 10 10 10 10 10 10 10 10 10 10 10		
	<u>i natan</u>			i i i i i i		UA	ILT MOD	COSTAT	NVENTOR	i de la compa					TOTAL
	4 30	38575 K S C 4	BARITE				SODA ASH		SOLKWICK	PAC-R	PHPA	CEDAR	TRUCKING		costs
		. 1000001 / 1000001	1	QUICK GEL	GAUSTIC	LIME		UNIDRILL			100 100 000				
t cost	1933		(5×)	(ex)	CAUSTIC (#X.)	LIME (ex)	(*×)	(ex)	(#X.)	(#X.)	(g#)	(sx)			
	NTORY		(sx)			11 1 50 10					(g≢)	(e×)			
RTING INVE			1			11 1 50 10					(g#)	(sx)	5		
RTING INVE	CEIVED		(sx)			11 1 50 10					(0+1)	(ex)			
ATING INVE ENTORY REC ED LAST 24 H DING INVENT	DEIVED HOURS ORY		(sx)			11 1 50 10					(gal)	(5,1)			
RTING INVE ENTORY REC D LAST 24 H HING INVENT LY MUD COS	DEIVED HOURS ORY		(sx)			11 1 50 10					(94)	(5x)			
RTING INVE ENTORY REC D LAST 24 H HING INVENT Y MUD COS VIOUS CLIMI	CEIVED KOURS ORY ST ULATIVE COST		(sx)			11 1 50 10					(ga)	(9.4)			
ENTORY REC ENTORY REC ED LAST 24 H DING INVENT LY MUD COS EVIOUS CUMI	CEIVED KOURS ORY ST ULATIVE COST		(sx)			11 1 50 10	(ax)	(Ex.)	(8.2)		(gal)		8		
RTING INVESTIGATION OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF T	CEIVED KOURS ORY ST ULATIVE COST		(sx)	(ex)	(ex)	11 1 50 10	(ax)	(EX)	(8.2)	(\$x)					
MUD G	CEIVED HOURS ORY ST ULLATIVE COST UD COST GAS DATA (In L	Inits)	120 120 SHOW INTER	(ex)	(ex) RATE ((ex)	MUD LC	(BX)	EPORT SHOW GAS DA	(ex)	(gal)				
RTING INVESTIGATION OF THE PROPERTY OF THE PRO	CEIVED HOURS ORY IT LLATIVE COST LD COST	Units)	(\$x) 120 SHOWINTER	(ex)	(ex)	(ex)	(ex)	(ps:)	(MX) EPORT SHOW GAS DA	(\$x)	Formation 1	ops:			
RTING INVESTIGATION OF THE PROPERTY OF THE PRO	CEIVED HOURS ORY ST ULLATIVE COST UD COST GAS DATA (In L	Inits)	120 120 SHOW INTER	(ex)	(ex) RATE ((ex)	MUD LC	(BX)	EPORT SHOW GAS DA	(ex)		ops:			
RTING INVESTING INVESTIGATION OF THE CONTROL OF THE	CEIVED HOURS ORY ST ULLATIVE COST UD COST GAS DATA (In L	Inits)	120 120 SHOW INTER	(ex)	(ex) RATE ((ex)	MUD LC	(BX)	EPORT SHOW GAS DA	(ex)	Formation 1	ops:	8)		
RTING INVESTING INVESTIGATION OF THE CONTROL OF THE	CEIVED HOURS ORY ST ULLATIVE COST UD COST GAS DATA (In L	Inits)	120 120 SHOW INTER	(ex)	(ex) RATE ((ex)	MUD LC	(BX)	EPORT SHOW GAS DA	(ex)	Formation 1	ops:			
RTING INVESTING INVESTIGATION OF THE CONTROL OF THE	CEIVED HOURS ORY ST ULLATIVE COST UD COST GAS DATA (In L	Inits)	120 120 SHOW INTER	(ex)	(ex) RATE ((ex)	MUD LC	GGER RI	EPORT SHOW GAS DA OURING UNITS	(ex)	Formation 1	ops:			
RTING INVERTIGATION RECEIVED IN TORY RECEIVED IN TORY RECEIVED IN TORY RECEIVED IN TORY RECEIVED IN TORY RECEIVED IN TORY RECEIVED IN TORY RECEIVED IN TORY RECEIVED IN TORY RECEIVED IN TORY RECEIVED IN TORY RECEIVED IN T	DEVELOPMENT OF THE PROPERTY OF	Azimuth	SHOW INTER FROM (N)	VAL TO (R)	RATE (SEFORE (N)	(ex) OF PENETRATION OUTING (it)	MUD LC	GGER RI	EPORT SHOW GAS DA OURING UNITS	(ex.) TA AFTER LIMITS	Formation 1	ops:	Deviation	Azimuth	
RTING INVERTING INVENTORY RECO	DEVICED SOURCES OF THE PROPERTY OF THE PROPERT	TRIP GAS Azimuth 134.79	SHOW INTER	(ex) (VAL) (B) (B) Depth 1407	RATE (SEFORE (S)	(ex) OF PENETRATION OURING (a) Assimuth 190.80	MUD LC N AFER (N) DEVIAT DL Angle 1.35	GGER RI BEFORE UNITS	EPORT SHOW GAS DA DURING UNTS	(ex.) TA AFTER LIMITS	Formation 1 Sample personal Sample Description	Cops: centages: iption:		Azimuth	1
RTING INVENTORY RECEIVED INTORY RECEIVED INTORY RECEIVED INTORY RECEIVED INTO INTO INTO INTO INTO INTO INTO INTO	DEVELOPMENT OF THE PROPERTY OF	Azimuth	SHOW INTER FROM (A)	VAL TO (R)	RATE (SEFORE (N)	(ex) OF PENETRATION OUTING (it)	MUD LC	GGER RI BEFORE UNITS	EPORT SHOW GAS DA DURING UNTS	(ex.) TA AFTER LIMITS	Formation 1 Sample personal Sample Description	Cops: centages: iption:		Azimuth	1
NTING INVENTION RECOVERY RECOV	Deviation 1.03 1.22 1.25	Azimuth 184.79 189.53 186.87 186.91	SHOW INTER FROM (A) DL Angle 0.19 0.76 0.17 0.21	(ex) (val) 70 (8) Depth 1407 1438 1468 1499	PATE (8) Deviation 0.69 0.75 0.73 0.84	(ax) OF PENETRATION OWNING (N) Assimuth 190.80 190.50 201.30 213.50	MUD LC N AFTER (N) DEVIAT DL Angle 1.35 0.39 0.47 0.63	GGER RI BEFORE UNITS	EPORT SHOW GAS DA DURING UNTS	(ex.) TA AFTER LIMITS	Formation 1 Sample personal Sample Description	Cops: centages: iption:		Azimuth	1
NTORY RECONTROL	DEVED NOURS NOW IT LLATIVE COST CONN GAS Deviation 1.03 1.22 1.20 1.25 1.34	Aximuth 184.79 189.53 186.87 180.49	SHOW INTER FROM (49) DL Angle 0.19 0.76 0.17 0.21 0.88	Depth 1407 1438 1468 1469 1532	(ex) RATE (BEFORE (5) 0.89 0.75 0.73 0.84 0.51	(ex.) OF PENETRATION OURING (b) Azimuth 190.80 190.50 201.30 213.50 206.70	MUD LC N AFTER (b) DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.03	GGER RI BEFORE UNITS	EPORT SHOW GAS DA DURING UNTS	(ex.) TA AFTER LIMITS	Formation 1 Sample personal Sample Description	Cops: centages: iption:		Azimuth	1
NTING INVENTING INVE	Deviation 1.03 1.20 1.20 1.26 1.34 1.26	Aximuth 184.79 180.53 186.87 180.91 180.49 180.29	SHOW INTER FROM (4) DL Angle 0.19 0.76 0.17 0.21 0.68 0.26	(ex) VAL To (%) Depth 1407 1433 1468 1499 1532 1563	Peviation 0.69 0.75 0.73 0.84 0.63	(ex.) OF PENETRATION OURING (t) Azimuth 190.50 201.30 218.50 208.70 194.00	MUD LC N AFTER (b) DEVIAT DL Angle 1.35 0.39 0.47 0.63 1.108 1.13	GGER RI BEFORE UNITS	EPORT SHOW GAS DA DURING UNTS	(ex.) TA AFTER LIMITS	Formation 1 Sample personal Sample Description	Cops: centages: iption:		Azimuth	1
NTING INVENTIVE RECONSTRUCTION OF THE PROPERTY	Deviation 1.22 1.22 1.24 1.34 1.26 1.32	Azimuth 184.79 189.53 186.87 180.49 180.49 175.88	SHOW INTER FROM (8) DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36	Depth 1407 1438 1469 1592 1593 1595	Paviation 0.69 0.75 0.73 0.84 0.51 0.83 0.65	(ex.) OF PENETRATION DURING (N) Assimuth 190.80 190.50 201.30 201.30 201.30 194.00 197.82	MUD LC N AFTER (N) DEVIAT 1.35 0.39 0.47 0.43 1.03 1.03 1.13 0.29	GGER RI BEFORE UNITS	EPORT SHOW GAS DA DURING UNTS	(ex.) TA AFTER LIMITS	Formation 1 Sample personal Sample Description	Cops: centages: iption:		Azimuth	1
MUD G SACK FEBRUAR MUD GS M	Deviation 1.03 1.20 1.20 1.26 1.34 1.26	Aximuth 184.79 180.53 186.87 180.91 180.49 180.29	SHOW INTER FROM (4) DL Angle 0.19 0.76 0.17 0.21 0.68 0.26	(ex) VAL To (%) Depth 1407 1433 1468 1499 1532 1563	Peviation 0.69 0.75 0.73 0.84 0.63	(ex.) OF PENETRATION OURING (t) Azimuth 190.50 201.30 218.50 208.70 194.00	MUD LC N AFTER (b) DEVIAT DL Angle 1.35 0.39 0.47 0.63 1.108 1.13	GGER RI BEFORE UNITS	EPORT SHOW GAS DA DURING UNTS	(ex.) TA AFTER LIMITS	Formation 1 Sample personal Sample Description	Cops: centages: iption:		Azimuth	1
MUD G SACK COUND COUNTY TO THE COUND COUNTY TO THE COUNTY	Deviation 1.03 1.22 1.25 1.34 1.33 1.34 1.33 1.48	Azimuth 184.79 189.53 186.87 180.49 175.88 164.40 162.92 175.88	SHOW INTER FROM (8) DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.68	Depth 1407 1438 1468 1459 1595 1626 1657 1688	Payiation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00	(N) Asimuth 190.80 190.50 201.30 213.50 206.70 194.00 202.10 202.10 202.10	MUD LC N AFTER (N) DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65	GGER RI BEFORE UNITS	EPORT SHOW GAS DA DURING UNTS	(ex.) TA AFTER LIMITS	Formation 1 Sample personal Sample Description	Cops: centages: iption:		Azimuth	1
NTING INVENTIVE RECONSTRUCTION OF THE PROPERTY	Deviation 1.03 1.22 1.20 1.25 1.34 1.33 1.43 1.43	Azimuth 134.79 189.53 186.87 180.49 180.29 175.88 164.40 162.92 143.19	SHOW INTER FROM (N) 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.39 0.12 0.68 1.29	Depth 1407 1438 1468 1469 1592 1563 1626 1657 1888 1720	Payintion 0.69 0.75 0.73 0.63 0.651 0.63 1.20 0.68	(8) Azimuth 190.80 190.50 201.30 211.50 208.70 194.00 197.82 198.70 202.10 202.10 202.10	MUD LC N AFTER (N) DEVIAT DL Angle 1.35 0.39 0.47 0.47 1.08 1.13 0.29 0.43 1.29 0.43 1.29 0.65 1.23	GGER RI BEFORE UNITS	EPORT SHOW GAS DA DURING UNTS	(ex.) TA AFTER LIMITS	Formation 1 Sample personal Sample Description	Cops: centages: iption:		Azimuth	1
Pepth Sas Sas Sas Sas Sas Sas Sas Sas Sas Sas	Deviation 1.22 1.20 1.26 1.34 1.33 1.48 1.43 1.08	Aximuth 184.79 189.53 186.87 183.91 180.29 175.88 164.40 162.92 155.82 143.19 137.08	SHOW INTER FROM (N) (N) (N) (N) (N) (N) (N) (N) (N) (N)	Depth 1407 1438 1468 1499 1592 1563 1595 16857 1688 1720 1751	Paviation 0.89 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88	(ex.) OF PENETRATIC OURING (b) 190.80 190.50 201.30 218.50 194.00 197.62 198.70 202.10 202.10 202.10 202.10 197.60	MUD LC N AFTER (N) DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.00 1.13 0.29 0.45 1.29 0.65 1.23 1.04	GGER RI BEFORE UNITS	EPORT SHOW GAS DA DURING UNTS	(ex.) TA AFTER LIMITS	Formation 1 Sample personal Sample Description	Cops: centages: iption:		Asimuth	1
MUD G ACCIONAL MUD G ACCIONAL	Deviation 1.03 1.22 1.26 1.32 1.34 1.33 1.48 1.43 0.84 0.71	Azimuth 184.79 189.53 186.87 183.91 180.49 180.29 175.88 164.40 162.92 156.82 143.19 137.08 130.59	SHOW INTER FROM (N) 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.39 0.12 0.68 1.29	Dapth 1407 1438 1468 1499 1592 1626 1657 1688 1720 1751 1782	Payiation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93	(N) Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 197.82 198.70 202.10 202.10 179.00 157.60	MUD LC N AFTER (N) DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 0.43	GGER RI BEFORE UNITS	EPORT SHOW GAS DA DURING UNTS	(ex.) TA AFTER LIMITS	Formation 1 Sample personal Sample Description	Cops: centages: iption:		Azimuth	1
Pepth Sack Kound Sack	Deviation 1.22 1.20 1.26 1.34 1.33 1.48 1.43 1.08	Aximuth 184.79 189.53 186.87 183.91 180.29 175.88 164.40 162.92 155.82 143.19 137.08	SHOW INTER FROM (19) DL Angle 0.19 0.17 0.26 0.36 0.26 0.36 0.36 0.12 0.68 1.29 1.88 0.51 0.95	Depth 1407 1438 1468 1499 1592 1563 1595 16857 1688 1720 1751	Paviation 0.89 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88	(ex.) OF PENETRATIC OURING (b) 190.80 190.50 201.30 218.50 194.00 197.62 198.70 202.10 202.10 202.10 202.10 197.60	MUD LC N AFTER (N) DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.00 1.13 0.29 0.45 1.29 0.65 1.23 1.04	GGER RI BEFORE UNITS	EPORT SHOW GAS DA DURING UNTS	(ex.) TA AFTER LIMITS	Formation 1 Sample personal Sample Description	Cops: centages: iption:		Asimuth	1
MUD G BACK ACOUND Septh 538 664 602 633 664 667 757 757 757 757 757 757	Deviation 1.03 1.22 1.26 1.32 1.34 1.43 1.43 0.84 0.71 0.86 0.50 0.91	Azimuth 184.79 189.53 186.87 183.91 180.49 180.29 175.88 164.40 182.92 156.82 143.19 130.59 112.85 107.94 109.50	SHOW INTER FROM (8) 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.59 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65	Depth 1407 1438 1468 1595 1626 1657 1688 1720 1751 1752 1813 1844 1875	Payiation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.93 1.12 1.05	(ax) P PENETRATION OWNING (b) Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.82 198.70 202.10 202.10 179.00 157.60 164.00 149.00 158.00	MUD LC N AFTER (N) DEVIAT DL Angle 1.35 0.39 0.43 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 1.04 0.65 1.23 1.06 0.59 0.63	GGER RI BEFORE UNITS	EPORT SHOW GAS DA DURING UNITS	(ex.) TA AFTER LIMITS	Formation 1 Sample personal Sample Description	Cops: centages: iption:		Azimuth	1
Depth STATE	Deviation 1.03 1.22 1.20 1.25 1.34 1.33 1.43 1.43 0.84 0.71 0.86 0.50 0.91 1.00 0.50 0.91 1.00 0	Azimuth 184.79 189.53 186.87 130.91 180.49 175.88 164.40 162.92 175.88 164.40 162.92 175.80 175.80 175.80 185.80 1	DL Angle 0.19 0.76 0.17 0.21 0.88 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62	Depth 1407 1438 1468 1459 1595 1626 1657 1888 1720 1751 1782 1813 1844 1195 1906	Deviation 0.69 0.75 0.73 0.84 0.51 0.85 0.81 1.20 0.84 0.84 0.84 0.81 1.20 1.00 0.85 0.84 1.12 1.05 1.12	(ex) PENETRATIC DURING (e) Assimuth 190.80 190.50 201.30 2118.50 208.70 194.00 197.82 198.70 202.10 202.10 179.00 157.60 164.00 158.00 146.50 165.00	MUD LC N AFTER (N) DEVIAT DL Angle 1.35 0.39 0.47 0.63 1.08 1.13 0.29 0.43 1.23 1.04 0.43 1.06 0.59 0.83 0.65	GGER RI BEFORE UNITS	EPORT SHOW GAS DA DURING UNITS	(ex.) TA AFTER LIMITS	Formation 1 Sample personal Sample Description	Cops: centages: iption:		Azimuth	1
Pepth Sas Sas Sas Sas Sas Sas Sas Sas Sas Sas	Deviation 1.03 1.22 1.20 1.25 1.34 1.26 1.34 1.33 1.43 1.43 1.43 0.84 0.71 0.86 0.50 0.91 1.04	Azimuth 184.79 189.53 186.87 183.91 180.29 175.88 164.40 162.92 156.82 143.19 130.59 112.85 107.94 109.50 120.10	SHOW INTER FROM (N) 0.19 0.76 0.17 0.26 0.36 0.36 0.36 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.65	Depth 1407 1438 1468 1595 1626 1657 1688 1720 1751 1752 1813 1844 1875	Payiation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.93 1.12 1.05	(ax) P PENETRATION OWNING (b) Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.82 198.70 202.10 202.10 179.00 157.60 164.00 149.00 158.00	MUD LC N AFTER (N) DEVIAT DL Angle 1.35 0.39 0.43 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 1.04 0.65 1.23 1.06 0.59 0.63	GGER RI BEFORE UNITS	EPORT SHOW GAS DA DURING UNITS	(ex.) TA AFTER LIMITS	Formation 1 Sample personal Sample Description	Cops: centages: iption:		Azimuth	1
MUD G ACCK TOTAL TO THE TOTAL	Deviation 1.03 1.22 1.26 1.32 1.34 1.33 1.48 1.43 0.84 0.71 0.86 0.50 0.91 1.00 1.04	Azimuth 184.79 189.53 186.87 183.91 180.49 180.29 175.88 164.40 182.92 156.82 143.19 130.59 112.85 107.94 109.50 120.10 126.70 132.57	DL Angle 0.19 0.76 0.17 0.21 0.88 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62	Depth 1407 1438 1468 1459 1595 1626 1657 1888 1720 1751 1782 1813 1844 1195 1906	Deviation 0.69 0.75 0.73 0.84 0.51 0.85 0.81 1.20 0.84 0.84 0.84 0.81 1.20 1.00 0.85 0.84 1.12 1.05 1.12	(ex) PENETRATIC DURING (e) Assimuth 190.80 190.50 201.30 2118.50 208.70 194.00 197.82 198.70 202.10 202.10 179.00 157.60 164.00 158.00 146.50 165.00	MUD LC N AFTER (N) DEVIAT DL Angle 1.35 0.39 0.47 0.63 1.08 1.13 0.29 0.43 1.23 1.04 0.43 1.06 0.59 0.83 0.65	GGER RI BEFORE UNITS	EPORT SHOW GAS DA DURING UNITS	(ex.) TA AFTER LIMITS	Formation 1 Sample personal Sample Description	Cops: centages: iption:		Azimuth	1
MUD G BACK MUD G	Deviation 1.03 1.22 1.20 1.25 1.34 1.26 1.34 1.33 1.43 1.43 1.43 0.84 0.71 0.86 0.50 0.91 1.04	Azimuth 184.79 189.53 186.87 183.91 180.29 175.88 164.40 162.92 156.82 143.19 130.59 112.85 107.94 109.50 120.10	SHOW INTER FROM (49) DL Angle (19) 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.36 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.62	Depth 1407 1438 1468 1459 1595 1626 1657 1888 1720 1751 1782 1813 1844 1195 1906	Deviation 0.69 0.75 0.73 0.84 0.51 0.85 0.81 1.20 0.84 0.84 0.84 0.81 1.20 1.00 0.85 0.84 1.12 1.05 1.12	(ex) PENETRATIC DURING (e) Assimuth 190.80 190.50 201.30 2118.50 208.70 194.00 197.82 198.70 202.10 202.10 179.00 157.60 164.00 158.00 146.50 165.00	MUD LC N AFTER (N) DEVIAT DL Angle 1.35 0.39 0.47 0.63 1.08 1.13 0.29 0.43 1.23 1.04 0.43 1.06 0.59 0.83 0.65	GGER RI BEFORE UNITS	EPORT SHOW GAS DA DURING UNITS	(ex.) TA AFTER LIMITS	Formation 1 Sample personal Sample Description	Cops: centages: iption:		Azimuth	1
Depth Sas Sas Sas Sas Sas Sas Sas Sas Sas Sas	Deviation 1.03 1.22 1.26 1.32 1.34 1.43 1.43 1.43 1.43 1.43 1.43 1.43	Azimuth 184.79 189.53 186.87 183.91 180.49 175.88 164.40 162.92 175.88 164.40 162.92 175.80 112.95 175.80 130.59 112.85 130.59 112.85 130.59 112.85 130.59 112.85 130.59 112.85 130.59 112.85 130.59 112.85 130.59 112.85 130.59 112.85 130.59 112.85 130.59 112.85 130.59 112.85 130.59 112.85 130.59 112.85 130.59 112.85 130.59 112.85 130.59 112.85 130.59 112.85 130.59 112.85 130.59 113.85 130.59 114.51 165.70	SHOW INTER FROM (%) DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.62 1.46	Depth 1407 1438 1468 1459 1595 1626 1657 1888 1720 1751 1782 1813 1844 1195 1906	Deviation 0.69 0.75 0.73 0.84 0.51 0.85 0.81 1.20 0.84 0.84 0.84 0.81 1.20 1.00 0.85 0.84 1.12 1.05 1.12	(ex) PENETRATIC DURING (e) Assimuth 190.80 190.50 201.30 2118.50 208.70 194.00 197.82 198.70 202.10 202.10 179.00 157.60 164.00 158.00 146.50 165.00	MUD LC N AFTER (N) DEVIAT DL Angle 1.35 0.39 0.47 0.63 1.08 1.13 0.29 0.43 1.23 1.04 0.43 1.06 0.59 0.83 0.65	GGER RI BEFORE UNITS	EPORT SHOW GAS DA DURING UNITS	(ex.) TA AFTER LIMITS	Formation 1 Sample personal Sample Description	Cops: centages: iption:		Azimuth	1
MUD G BACK ROUNDS BACK BACK ROUNDS BACK	Deviation 1.03 1.22 1.20 1.34 1.34 1.43 1.43 1.43 1.43 1.43 1.43	Azimuth 184.79 189.53 186.87 183.91 180.49 180.29 175.88 164.40 162.92 175.88 164.40 162.92 175.85 107.94 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75	SHOW INTER FROM (4) DL Angle 0.19 0.76 0.17 0.21 0.88 0.26 0.36 0.89 0.12 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.62 1.48 2.30	Depth 1407 1438 1468 1459 1595 1626 1657 1888 1720 1751 1782 1813 1844 1195 1906	Deviation 0.69 0.75 0.73 0.84 0.51 0.85 0.81 1.20 0.84 0.84 0.84 0.81 1.20 1.00 0.85 0.84 1.12 1.05 1.12	(ex) PENETRATIC DURING (e) Assimuth 190.80 190.50 201.30 2118.50 208.70 194.00 197.82 198.70 202.10 202.10 179.00 157.60 164.00 158.00 146.50 165.00	MUD LC N AFTER (N) DEVIAT DL Angle 1.35 0.39 0.47 0.63 1.08 1.13 0.29 0.43 1.23 1.04 0.43 1.06 0.59 0.83 0.65	GGER RI BEFORE UNITS	EPORT SHOW GAS DA DURING UNITS	(ex.) TA AFTER LIMITS	Formation 1 Sample personal Sample Description	Cops: centages: iption:		Azimuth	1
Pepth	Deviation 1.03 1.22 1.20 1.25 1.34 1.26 1.34 1.33 1.43 0.84 0.71 0.86 0.50 0.91 1.19 1.01 0.76 0.27 0.30	Aximuth 184.79 189.53 186.87 183.91 180.29 175.88 164.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75 203.90	SHOW INTER FROM (49) DL Angle (49) 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.39 0.12 0.68 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.62 1.48 2.30 0.51	Depth 1407 1438 1468 1459 1595 1626 1657 1888 1720 1751 1782 1813 1844 1195 1906	Deviation 0.69 0.75 0.73 0.84 0.51 0.85 0.81 1.20 0.84 0.84 0.84 0.81 1.20 1.00 0.85 0.84 1.12 1.05 1.12	(ex) PENETRATIC DURING (e) Assimuth 190.80 190.50 201.30 2118.50 208.70 194.00 197.82 198.70 202.10 202.10 179.00 157.60 164.00 158.00 146.50 165.00	MUD LC N AFTER (N) DEVIAT DL Angle 1.35 0.39 0.47 0.63 1.08 1.13 0.29 0.43 1.23 1.04 0.43 1.06 0.59 0.83 0.65	GGER RI BEFORE UNITS	EPORT SHOW GAS DA DURING UNITS	(ex.) TA AFTER LIMITS	Formation 1 Sample personal Sample Description	Cops: centages: iption:		Azimuth	1
NEW NEW	Deviation 1.03 1.22 1.25 1.34 1.43 1.43 1.43 1.43 1.43 1.43 1.43	Azimuth 184,79 189,53 186,87 183,91 180,49 175,88 164,40 162,92 175,88 164,40 162,92 175,88 104,90 175,88 104,90 175,88 104,10 180,79 112,85 107,94 109,50 120,10 126,70 132,57 137,30 141,51 165,70 235,75 203,90 173,03	SHOW INTER FROM (%) DL Angle 0.19 0.76 0.17 0.21 0.68 0.36 0.89 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.62 1.46 2.30 0.51	Depth 1407 1438 1468 1459 1595 1626 1657 1888 1720 1751 1782 1813 1844 1195 1906	Deviation 0.69 0.75 0.73 0.84 0.51 0.85 0.81 1.20 0.84 0.84 0.84 0.81 1.20 1.00 0.85 0.84 1.12 1.05 1.12	(ex) PENETRATIC DURING (e) Assimuth 190.80 190.50 201.30 2118.50 208.70 194.00 197.82 198.70 202.10 202.10 179.00 157.60 164.00 158.00 146.50 165.00	MUD LC N AFTER (N) DEVIAT DL Angle 1.35 0.39 0.47 0.63 1.08 1.13 0.29 0.43 1.23 1.04 0.43 1.06 0.59 0.83 0.65	GGER RI BEFORE UNITS	EPORT SHOW GAS DA DURING UNITS	(ex.) TA AFTER LIMITS	Formation 1 Sample personal Sample Description	Cops: centages: iption:		Azimuth	1
MUD G BACK MUD G	Deviation 1.03 1.22 1.20 1.25 1.34 1.26 1.34 1.33 1.43 0.84 0.71 0.86 0.50 0.91 1.19 1.01 0.76 0.27 0.30	Aximuth 184.79 189.53 186.87 183.91 180.29 175.88 164.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75 203.90	SHOW INTER FROM (49) DL Angle (49) 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.39 0.12 0.68 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.62 1.48 2.30 0.51	Depth 1407 1438 1468 1459 1595 1626 1657 1888 1720 1751 1782 1813 1844 1195 1906	Deviation 0.69 0.75 0.73 0.84 0.51 0.85 0.81 1.20 0.88 0.84 1.12 1.05 1.18	(ex) PENETRATIC DURING (e) Assimuth 190.80 190.50 201.30 2118.50 208.70 194.00 197.82 198.70 202.10 202.10 179.00 157.60 164.00 158.00 146.50 165.00	MUD LC N AFTER (N) DEVIAT DL Angle 1.35 0.39 0.47 0.63 1.08 1.13 0.29 0.43 1.23 1.04 0.43 1.06 0.59 0.83 0.65	GGER RI BEFORE UNITS	EPORT SHOW GAS DA DURING UNITS	(ex.) TA AFTER LIMITS	Formation 1 Sample personal Sample Description	Cops: centages: iption:		Asimuth	,
LATTINE INVESTIGATION OF THE PROPERTY OF THE P	Deviation 1.03 1.22 1.25 1.34 1.33 1.34 1.43 0.84 1.43 0.86 0.50 0.91 1.00 0.76 0.27 0.30 0.35 0.44 0.50 D FORMATION DE PORMATION DE PO	Azimuth 184.79 189.53 186.87 183.91 180.49 175.88 164.40 162.92 175.88 164.40 162.92 175.87 183.91 175.87 185.97 1	DL Angle 0.19 0.76 0.19 0.76 0.17 0.21 0.88 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.85 0.62 0.40 0.53 0.33 0.62 1.48 2.30 0.51 0.51 0.53	Depth 1407 1438 1468 1459 1595 1626 1657 1888 1720 1751 1782 1813 1844 1195 1906	Deviation 0.69 0.75 0.73 0.84 0.51 0.85 0.81 1.20 0.88 0.84 1.12 1.05 1.18	(ex) PENETRATIC DURING (e) Assimuth 190.80 190.50 201.30 2118.50 208.70 194.00 197.82 198.70 202.10 202.10 179.00 157.60 164.00 158.00 146.50 165.00	MUD LC N AFTER (N) DEVIAT DL Angle 1.35 0.39 0.47 0.63 1.08 1.13 0.29 0.43 1.23 1.04 0.43 1.06 0.59 0.83 0.65	GGER RI BEFORE UNITS	EPORT SHOW GAS DA DURING UNITS	(ex.) TA AFTER LIMITS	Formation 1 Sample personal Sample Description	Cops: centages: iption:		Azimuth	,
MUD G DLAST 24 H NG INVENT. MUD GOS M	Deviation 1.03 1.22 1.20 1.25 1.34 1.26 1.34 1.33 1.43 0.84 0.71 0.50 0.91 1.19 1.01 0.76 0.27 0.30 0.35 0.44 0.50	Azimuth 184.79 189.53 186.87 183.91 180.49 175.88 164.40 162.92 175.88 164.40 162.92 175.87 183.91 175.87 185.97 1	DL Angle 0.19 0.76 0.19 0.76 0.17 0.21 0.88 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.85 0.62 0.40 0.53 0.33 0.62 1.48 2.30 0.51 0.51 0.53	Depth 1407 1438 1468 1459 1595 1626 1657 1888 1720 1751 1782 1813 1844 1195 1906	Deviation 0.69 0.75 0.73 0.84 0.51 0.85 0.81 1.20 0.88 0.84 1.12 1.05 1.18	(ex) PENETRATIC DURING (e) Assimuth 190.80 190.50 201.30 2118.50 208.70 194.00 197.82 198.70 202.10 202.10 179.00 157.60 164.00 158.00 146.50 165.00	MUD LC N AFTER (N) DEVIAT DL Angle 1.35 0.39 0.47 0.63 1.08 1.13 0.29 0.43 1.23 1.04 0.43 1.06 0.59 0.83 0.65	GGER RI BEFORE UNITS	EPORT SHOW GAS DA DURING UNITS	(ex.) TA AFTER LIMITS	Formation 1 Sample personal Sample Description	Cops: centages: iption:		Azimuth	,
NEW NEW	Deviation 1.03 1.22 1.25 1.34 1.33 1.34 1.43 0.84 1.43 0.86 0.50 0.91 1.00 0.76 0.27 0.30 0.35 0.44 0.50 D FORMATION DE PORMATION DE PO	Azimuth 184.79 189.53 186.87 183.91 180.49 175.88 164.40 162.92 175.88 164.40 162.92 175.87 183.91 175.87 185.97 1	DL Angle 0.19 0.76 0.19 0.76 0.17 0.21 0.88 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.85 0.62 0.40 0.53 0.33 0.62 1.48 2.30 0.51 0.51 0.53	Depth 1407 1438 1468 1459 1595 1626 1657 1888 1720 1751 1782 1813 1844 1195 1906	Deviation 0.69 0.75 0.73 0.84 0.51 0.85 0.81 1.20 0.88 0.84 1.12 1.05 1.18	(t) Azimuth 190.80 190.50 201.30 213.50 206.70 194.00 187.82 196.70 202.10 202.10 179.00 157.60 164.00 149.00 155.00 146.50 152.00	MUD LCON AFTER (N) DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.03 1.13 0.29 0.43 1.29 0.65 1.23 1.04 0.43 1.08 0.59 0.83 0.54 1.59	GGER RI BEFORE LIMITS LON SUI Depth	EPORT SHOW GAS DA DURING UNITS	(ex.) TA AFTER LIMITS	Formation 1 Sample personal Sample Description	Cops: centages: iption:		Azimuth	1
Pepth	Deviation 1.03 1.22 1.25 1.34 1.33 1.34 1.43 0.84 1.43 0.86 0.50 0.91 1.00 0.76 0.27 0.30 0.35 0.44 0.50 D FORMATION DE PORMATION DE PO	Azimuth 184.79 189.53 186.87 183.91 180.49 175.88 164.40 162.92 175.88 164.40 162.92 175.87 183.91 175.87 185.97 1	SHOW INTER FROM (4) DL Angle (4) 0.19 0.76 0.17 0.21 0.88 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.62 1.48 2.30 0.51 0.55 0.53 0.33 0.62 1.48 2.30 0.51 0.58	Depth 1407 1438 1469 1532 1563 1595 1626 1657 1888 1720 1751 1782 1813 1844 1875 1906 1935	Payintion O.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 1.12 1.05 1.18 1.30 1.75	(ex) PENETRATIC OURING (8) Azimuth 190.80 190.50 201.30 201.30 191.50 202.10 194.00 147.82 196.70 194.00 149.00 155.00 145.00 155.00 155.00 155.00	MUD LC N AFTER (8) DEVIAT DL Angle 1.35 0.39 0.47 0.63 1.08 1.19 0.43 1.29 0.43 1.06 0.59 0.55 1.23 1.04 0.45 1.59	GGER RI BEFORE LINIS BON SUI Depth RCULATI PUMP	EPORT SHOW GAS DA OURING LINTS RVEYS Deviation	(ex) A AFTER LINETS Azimuth	Formation 1 Sample personal Sample Description 1 DL Angle UATING DETA	Cops: Centages: Iption: Depth	Deviation	ANNUARVE	DLAngle
NOTIFIED	Deviation 1.03 1.22 1.25 1.34 1.48 1.43 1.48 1.43 1.48 1.43 1.44 0.71 0.86 0.90 1.00 1.16 1.19 1.00 1.01 1.16 1.19 1.01 1.01 0.76 0.27 0.30 0.35 0.44 0.50 0.50 0.35 0.44 0.50 0.50 0.50 0.50 0.50 0.50 0.5	Aximuth 184.79 189.53 186.87 185.91 180.49 180.29 175.88 164.40 162.92 156.82 143.19 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75 203.90 173.03 172.10 163.30 170.98:	SHOW INTER FROM (N) DL. Angle 0.19 0.19 0.76 0.21 0.68 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51 0.91 0.65 0.62 0.40 0.53 0.33 0.33 0.30 0.62 1.48 0.51 0.58 0.28 0.30	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1857 1751 1782 1813 1844 1875 1906 1935	RATE (SEFORE (8) Deviation 0.69 0.75 0.73 0.84 0.51 1.20 1.00 0.85 0.81 1.20 1.01 1.02 1.02 1.03 1.75 ASSUMED EFF	(%) Azimuth 190.80 190.50 201.30 218.50 206.70 202.10 194.00 187.82 196.70 202.10 179.00 149.00 155.00 164.00 149.00 155.00 164.00	MUD LCON AFTER (N) DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.03 1.13 0.29 0.43 1.123 0.65 1.23 0.65 1.23 0.65 1.23 0.65 1.23 0.44 1.59 0.83 0.54 1.59	GGER RI BEFORE LIMITS ION SUI Depth RCULAT! PLIME PLANE	EPORT SHOW GAS DA OURING LIVITS RVEYS Deviation	(ex) (ex) (Ax) AFTER LINITS Azimuth	Formation 1 Sample per Sample Description DL Angle	Dopth Less the property of th	Deviation	ANNIAR VEL	DLAngle
Popth Same S	Deviation 1.03 1.22 1.25 1.34 1.33 1.34 1.43 0.84 1.43 0.86 0.50 0.91 1.00 0.76 0.27 0.30 0.35 0.44 0.50 D FORMATION DE PORMATION DE PO	Azimuth 184.79 189.53 186.87 183.91 180.49 175.88 164.40 162.92 175.88 164.40 162.92 175.87 183.91 175.87 185.97 1	SHOW INTER FROM (4) DL Angle (4) 0.19 0.76 0.17 0.21 0.88 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.62 1.48 2.30 0.51 0.55 0.53 0.33 0.62 1.48 2.30 0.51 0.58	Depth 1407 1438 1469 1532 1563 1595 1626 1657 1888 1720 1751 1782 1813 1844 1875 1906 1935	Payintion O.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 1.12 1.05 1.18 1.30 1.75	(ex) PENETRATIC OURING (8) Azimuth 190.80 190.50 201.30 201.30 191.50 202.10 194.00 147.82 196.70 194.00 149.00 155.00 145.00 155.00 155.00 155.00	MUD LC N AFTER (8) DEVIAT DL Angle 1.35 0.39 0.47 0.63 1.08 1.19 0.43 1.29 0.43 1.06 0.59 0.55 1.23 1.04 0.45 1.59	GGER RI BEFORE LINIS BON SUI Depth RCULATI PUMP	EPORT SHOW GAS DA OURING LINTS RVEYS Deviation	(ex) A AFTER LINETS Azimuth	Formation 1 Sample personal Sample Description 1 DL Angle 1 DL Ang	Cops: Centages: Iption: Depth	Deviation	ANNUARVE	DLAngle

EVERGREEN OPERATING, INC. DAILY DRILLING REPORT

RIG CONTACT IN	FORMATION:
OFFICE TRAILER / FAX:	970 942 7543
CONSULTANT HAND CELL:	303 913 1054
OOGHOUSE:	307 258 7315
weven.	

DATE SPUD DATE	6AM DEPTH
8/26/2004 8/16/2004	2275
REPORT NO.	24 HR FOOTAGE
10	248
DRLG CONTRACTOR	DAYS SINCE SPUD
Elenburg, Rig 12	10
CONSULTANT	AFE# AP!#
John C. Lamb	43-007-30718

ACTIVITY AT REPORT TIME:

Drilling ahead

Daily cost | CUM COST | AFE COSTS | S | 323,429 | S | -

CI	IRONOLOG	Y OF DAIL	Y OPERATIONS (06:00 - 06:00 HRS)	SLOW	PUMP RA	TE DATA:		1.55.1	G WEIGHT INFO	
ROM	то	HOURS	The state of the s	Depth	SPM	Pressure	Eff BHA WI		Slackoff:	Hoisting:
hrs)	(hrs)	(hrs)	Activity:	1713	54	275	43,000	94,000	92,000	95,000
06:00	13:30	7.50	Rotate 2027 - 2082 periodic sweep with SAAP, LCM & d	etergent						
13:30	14:00	0.50	Service rig							
14:00	16:30	2.50	Slide 2082 - 2096							
16:30	02:00	9.50	Rotate 2096 - 2236 Note ROP increased at 2100' as sa	mples bec	ame increa	asingly sandy				
02:00	02:15	0.25	Change rod oiler pump							
02:15	05:00	2.75	Rotate 2236 - 2266							
05:00	06:00	1.00	Slide 2266 - 2275							
									QFC	EIVED-
						_			7 J Insu No.	7 Brees 9 W Some South
									- BEA	1
					****				DEC	1 3 2004
									<i></i>	
									<u>0 NO OF OIL</u>	GAG & MINING
TOTAL	HOURS	24.00								

SUMMARY	DAILY	CUM
DESC.	(hrs)	(hrs)
Orill	23.25	144.25
Trip	20.20	13.75
Circulate		0.75
Rig Repair	0.25	22.25
Rig Service	0.50	3.25
Dev Survey		
NU / ND		8.50
Cement		
Run Casing		
woc		
OH Logging		
Mix Mud		
MI & RU		6.00
RatHole		
Mouse Hole		
Fishing		
Other		0.50
Coring		
inspect BHA		
Cut drig line		
Wash & Ream		
Drill Cement		6.25
TestBOPE		1.50
woo		
PU/LD BHA		7.00
inspicinc equip		3.50
TOTALS	24.00	217.50

			DAILY		CUM		AFE	
COST CODE	DESCRIPTION OF DAILY COSTS		(\$)		(\$)		(\$)	
2030.010	Land, Legal, Title, Survey, Arch, Damages, Permits, Signs							
2030.031	Dirtwork, Road, Location, Pits, Liner							
2030.019	Contract Drilling 9480 / day 392.5 / h cond 5071 26,000 mob sfc 36791	\$	9,480	\$	159,752			
2032.001	Water			\$	2,376			
2032.013	Drill Bits, Stabilizers, Reamers			\$	24,000			
2031.046	Cementing and Services			\$	5,000			
2030.053	Coring and Analysis					_		
2030.052	Logging							
2030.054	Mud Logging			L				
2030.037	Rental Equipment	\$	1,501	\$	17,418			
2030.028	Transportation			\$	8,362			
2032.004	Mud and Chemicals	\$	1,640	\$	13,064			
	Directional Services, Mud Motors	\$	6,234	\$	59,806			
	Intermediate casing							
2030.035	Contract Labor			\$	2,920			
2030.022	Engineering / Supervision	\$	800	\$	8,000			
2030.099	Intangible Miscellaneous and Contingencies			<u> </u>				
2040.001	Surface Casing			\$	17,790			
2040.004	Production Casing							
1011.000	Float Equipment, Shoes, Centralizers							
1041.000	Wellhead Equipment			\$	4,941			
1073.000	Bottom Hole Pump / Gas Lift / Other							
1104.000	Drivehead, Engine / Motor and Hydraulic Pump / Electric Unit							
2040.052 / 2040.055	Valves and Fittings, Small / Large			1				
2040.067	Other Surface Equipment							
2040.099	Tangible Miscellaneous and Contingencies							
	TOTAL COSTS	5	19,655	5	323,429	s		

Report #	10	Date:	08/26/04 Well N	ame:	D/	AILY DR	ILLING		RT			_			Page 2
			7701114	<u> </u>	, , , ,			T RECOR	D	·		-			
ENT	BIT			1		DEPTH	DEPTH	FOOTAGE	CUM BIT			I	BIT	8	IT GRADING
NO.	SIZE			SERIAL	JETS	. IN	our	DRILLED	HOURS	ROP	WOB .	RPM	TORQUE	la Cont Build on	Seals Gge Dull. Oti
(P)	(IH)	MFG	TYPE	NO.	(32/32/32)	(A)	1,799	1,305	(hrs) 102.75	(f/thr) 12.7	36 - 43	MTR/TBL 45 / 60	(R -1bs) 2100 - 2900	+	
2	12 1/4 12 1/4	Security Security	XL18N XL43	754840 10408516	18 / 18 / 18	1,799	2,275	476	51.00	9.3	38 - 40	45 / 45-70	1500 - 2000		
	12 1/4	Oscaria		1,0,1224			İ	0		#DIV/0!					
				1			ļ	0		#DIV/0!					
	ļ		_			ļ	ļ	0		#DIV/0!	 	 -			
				+				0		#DIV/0!	 	1			
COM	MENTS					<u> </u>	,	-l							
		MPN/P		Ţ						CASING	DATA				7.53
RENTAL	DAILY	CUM		-		1		T	EXTERNAL	INTERNAL			тор	воттом	ľ
ITEM	COSTS	COSTS		SIZE	WEIGHT	GRADE	CONIN	DRIFT ID	COLLAPSE	YIELD	CAPACITY	LENGTH	SET AT	SET AT	1.34
	(\$)	(5)					1 1 1		(psi)	(psi)	(6 bis/ft)	(ft)	(ft)	(KKB)	1
Living Qtrs	\$ 315	\$ 3,210		30"	NA .	NA IEE	CTAC	12.450	1 120	2.720	0.15450	40.00 500.00	2.00	40.00 498.00	
rac Tank	\$ 45	\$ 440 \$ 600		13 3/8"	54.5	J55	ST&C	12.459	1,130	2,730	0.15450	300.00	2,00	435.00	
orklift ortajohn	\$ 60 \$ 20	\$ 600 \$ 200		_		·									
ud Trailer	\$ 50	\$ 500													
ud Cleaner	\$ 375	\$ 3,750			9.5			В	оттомно			· ·			
DR	\$ 100	\$ 1,000				Figure 1				MAXIMUM	MINIMUM	I DOT!		Library . To	
utodniler	\$ 90	\$ 900 \$ 375		SCRIPTION OF	RHA	DRO	VIDER	BOX	AD SIZE PIN	0.D. (in)	(0.0)	LENGTH (B)	HOURS RUN	HRS SINCE INSPECTION	
.! mud cinr till collars	\$ 196	\$ 4,193	DE DE	Bit	~~		unity		6 5/8 R	12.250		1.25			
nock Sub	\$ 250	\$ 2,250	7/8 Lol	e 4 Stage M	ud Malor	1	DI	6 5/8 R	6 5/8 R	8,000	<u> </u>	29.52			
ner				Float Sub			DI	6 5/8 R	6 5/8 R	8.000	3.000	3.02			
her	ļ			inffith Shock			idle	6 5/8 R	6 5/8 R	8.000	2.688 3.250	11.99 30.58			
her	-			Off Sub & 0		 	iDI iDI	6 5/8 R 6 5/8R	6 5/8 R 6 5/8 R	7.750	3.250	8.94			
ther		\vdash	Hang	XO XO			DI	6 5/8 H90	6 5/8 R	8.000	3.250	2.35			
her			7 -	7 3/4° Drill C	ollars	Г	ig	6 5/8 H90	6 5/8 H90	7.750	2.250	340.02			
ther				XO			DI	4 1/2 XH	6 5/8 H90	7.750	2.625	2.35			
TOTALS	\$ 1,501	\$ 17,418	10	- 6 1/2 Drill (Collars		ig	4 1/2 XH	4 1/2 XH	6,500	2.250	309.53		L	L
1797543	Sec. 1951	edies for a			711 49 1	86, Jan	DRILLIN	IG MUD R	EPORT				1.4		er Profession
SAMPLE		MUD	PUNNEL			GEL	FILTRATE		CAKE		SAND				
DEPTH	TIME (bh:mm)	WT.	VISCOSITY (sec/qt)	PV/YP	KCL (%)	STRENGTH (IN100 A2)	API (mi/30 min)	(ppm)	THICKNESS (/32 ln)	SOLIDS (% vol)	CONTENT (% vel)	pН	CHLORIDES (ppm)	ALKALINITY Pf/Mf	LCM lb/gal
2,050	09:00	(ppg) 9.20	40	7 / 25	2.60	7 / 18	16.0	20	2	5.5	1/4	9.5	15,000	.6/3.4	
2,128	18:00	9.20	40	11 / 18	2.60	6 / 15	15.0	20	2	5.5	1/4	10.0	15,000	.4/3.4	
2,270	05:30	9.30	42	1			14.0	<u> </u>			l	10.0		<u> </u>	
a 1,0,000,000					111 138113	DA	ILY MUD	COST & I	NVENTOR	Y					
NT COST			BARITE (\$x.)	QUICK GEL (ex.)	CAUSTIC (ex.)	LIME (sx.)	SODA ASH	UNIDRILL (ex.)	SOUKWICK (ex.)	PAC-R	PHPA (gal)	CEDAR (#X)	TRUCKING (\$)		cos rs (\$)
TARTING INV	ENTORY		120								ļ				
MENTORY RE				ļ			-								
ISED LAST 24 NOING INVEN							-								
AILY MUD CO										1	1				1,6
	MULATIVE COST														11,4
LIMULATIVE N	MUD COST			l		l .	<u> </u>				1			L	13,0
			Jahan III. da ya		17.44 177 1818.3	**************************************	MUDLO	GGER R	EPORT				ay the		
	GAS DATA (In L		SHOW INTE			F PENETRATI			SHOW GAS DA					· Di 24001	
	CONIN GAS	TRIP GAS	FROM	10 (ft)	BEFORE:	DURING (ft)	AFTER (R)	BEFORE	DURING	AFTER	Formation '	iops:	possible Pr	rice River 2100'	
GROUND	GAS		(4)	10	(10)	(#)	[K)	UNIS	3413	U.V.IS	Sample per	centages:			
								<u> </u>			Sample Desc				
		ļ				<u> </u>	<u> </u>	1		<u> </u>	<u> </u>				
d siliente	angles (18	*	Applia, historia	45.44.44	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	38357V 4 .	DEVIAT	ION SU	PVEVS	V-V-115	Tual Nas Nasah	33.1 P.	ing same.		
				1 1 1 1 1 1 1 1 1				A. A. 18			INCOME.				gga gairtadh a. Barann 📥 🕟 🗀
Depth 538	Deviation 1.03	Azimuth 184.79	DL Angle 0.19	Depth 1407	Deviation 0.69	Azimuth 190.80	DL Angle 1.35	Depth	Deviation	Azimuth	DL Angle	Depth	Deviation	Azimuth	DL Angle
566	1.03	189.53	0.76	1438	0.75	190.50	0.39				.				
	1.20	186.87	0.17	1468	0.73	201.30	0.47								
602	1.25	188.91	0.21	1499	0.84	218.50	0.83								
602 633		180.49	0.68	1532	0.51	206.70	1.08	 			ļ	L			
602 633 664	1.34		0.26	1563 1595	0.83	194.00 187.82	1.13 0.29	 				——			
602 633 664 695	1.26	180.29	2.50	1626	0.81	196.70	0.43	 			 				
602 633 664		175.88 164.40	0.89			202.10	1.29				<u> </u>				
602 633 664 695 727	1.26 1.32	175.88	0.12	1657	1.20		0.65								
602 633 664 695 727 757 787 817	1.26 1.32 1.34 1.33 1.48	175.88 164.40 162.92 156.82	0.12 0.68	1657 1688	1.00	202.10		L							
602 633 664 695 727 757 787 817 844	1.26 1.32 1.34 1.33 1.48 1.43	175.88 164.40 162.92 156.82 143.19	0.12 0.68 1.29	1657 1688 1720	1,00 0.88	179.00	1.23							1	
602 633 664 695 727 757 787 817 844 876	1.26 1.32 1.34 1.33 1.48 1.43 0.84	175.88 164.40 162.92 156.82 143.19 137.08	0.12 0.68 1.29 1.88	1657 1688 1720 1751	1.00 0.88 0.84	179.00 157.60	1.04				 				
602 633 664 695 727 757 787 817	1.26 1.32 1.34 1.33 1.48 1.43	175.88 164.40 162.92 156.82 143.19	0.12 0.68 1.29	1657 1688 1720	1,00 0.88	179.00									
602 633 664 695 727 757 787 817 844 876 907	1.26 1.32 1.34 1.33 1.48 1.43 0.84 0.71	175.88 164.40 162.92 156.82 143.19 137.08 130.59	0.12 0.68 1.29 1.88 0.51	1657 1688 1720 1751 1782	1.00 0.88 0.84 0.93	179.00 157.60 164.00	1.04 0.43								
602 633 664 695 727 757 787 817 844 876 907 936 971	1.26 1.32 1.34 1.33 1.48 1.43 0.84 0.71 0.86 0.50	175.88 164.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50	0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65	1657 1688 1720 1751 1782 1813 1844 1875	1.00 0.88 0.84 0.93 1.12 1.05 1.18	179.00 157.60 164.00 149.00 158.00 146.50	1.04 0.43 1.06 0.59 0.83								
602 633 664 695 727 787 817 844 876 907 936 971 1034 1066	1.26 1.32 1.34 1.33 1.48 1.43 0.84 0.71 0.86 0.50 0.91	175.88 184.40 182.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10	0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62	1657 1688 1720 1751 1782 1813 1844 1875	1.00 0.88 0.84 0.93 1.12 1.05 1.18 1.30	179.00 157.60 164.00 149.00 158.00 146.50 152.00	1.04 0.43 1.06 0.59 0.83 0.54								
602 633 664 695 727 787 817 844 876 907 936 971 1034 1066 1097	1.26 1.32 1.34 1.33 1.48 1.43 0.84 0.71 0.86 0.50 0.91 1.00	175.88 164.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70	0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40	1657 1688 1720 1751 1782 1813 1844 1875 1906	1.00 0.88 0.84 0.93 1.12 1.05 1.18 1.30 1.75	179.00 157.60 164.00 149.00 158.00 146.50 152.00 156.00	1.04 0.43 1.06 0.59 0.83 0.54 1.59								
602 633 664 695 727 757 787 817 844 876 907 936 971 1034 1066 1097	1.26 1.32 1.34 1.33 1.48 1.43 0.84 0.71 0.86 0.50 0.91 1.00 1.04	175.88 164.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70	0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40	1657 1688 1720 1751 1782 1813 1844 1875 1906 1935	1,00 0.88 0.84 0.93 1.12 1.05 1.18 1.30 1.75 1.70	179.00 157.60 164.00 149.00 158.00 146.50 152.00 156.00 161.00	1.04 0.43 1.06 0.59 0.83 0.54 1.59								
602 633 664 695 727 757 787 817 844 876 907 936 971 1034 1066 1097 1128	1.26 1.32 1.34 1.33 1.48 1.43 0.84 0.71 0.86 0.50 0.91 1.00 1.04 1.18	175.88 184.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30	0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40	1657 1688 1720 1751 1782 1813 1844 1875 1906	1.00 0.88 0.84 0.93 1.12 1.05 1.18 1.30 1.75	179.00 157.60 164.00 149.00 158.00 146.50 152.00 156.00 161.00	1.04 0.43 1.06 0.59 0.83 0.54 1.59 0.50								
602 633 664 695 727 757 787 817 844 876 907 936 971 1034 1066 1097	1.26 1.32 1.34 1.33 1.48 1.43 0.84 0.71 0.86 0.50 0.91 1.00 1.04	175.88 164.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70	0.12 0.68 1.29 1.85 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.62 1.48	1657 1688 1720 1751 1782 1813 1844 1875 1906 1935 1967	1,00 0.88 0.84 0.93 1.12 1.05 1.18 1.30 1.75 1.70	179.00 157.60 164.00 149.00 158.00 146.50 152.00 156.00 161.00	1.04 0.43 1.06 0.59 0.83 0.54 1.59								
602 633 664 895 727 757 787 817 844 876 907 936 971 1034 1066 1159 1191 1128 1159 1191 1221	1.28 1.32 1.33 1.48 1.33 1.48 0.84 0.71 0.88 0.50 0.91 1.00 1.04 1.16 1.19 1.01 0.76	175.88 164.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 125.70 125.70 125.70 127.30	0.12 0.68 1.29 1.86 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.62 1.44 2.30	1657 1688 1720 1751 1782 1813 1844 1875 1906 1935 1967 1997 2028 2060 2091	1,00 0.88 0.84 0.93 1,12 1,05 1,18 1,30 1,75 1,70 1,61 1,91 1,88 1,95	179.00 157.60 164.00 149.00 158.00 148.50 152.00 156.00 156.00 161.00 158.40 164.20 154.10	1.04 0.43 1.06 0.59 0.83 0.54 1.59 0.50 0.39 1.12 1.05 0.26								
602 633 664 695 727 757 787 817 844 876 907 936 971 1034 1066 1097 1128 1159 1191 1221 1221 1225 1283	1.28 1.32 1.33 1.48 1.33 1.48 0.84 0.71 0.88 0.50 0.91 1.00 1.04 1.16 1.19 1.01 0.76 0.27	175.88 194.40 182.92 156.62 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 185.70 235.75 203.90	0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.62 1.48 2.30 0.51	1657 1688 1720 1751 17751 1813 1844 1875 1996 1997 2028 2060 2091 2120	1,00 0.88 0.84 0.93 1.12 1.05 1.18 1.30 1.75 1.70 1.61 1.91 1.88 1.95 1.74	179.00 157.60 164.00 149.00 158.00 168.50 152.00 156.00 161.00 158.40 164.20 155.20 148.60	1.04 0.43 1.06 0.59 0.83 0.54 1.59 0.50 0.39 1.12 1.05 0.26 1.03								
602 633 664 895 727 757 787 844 876 907 907 938 971 1034 1066 1128 1159 1191 1221 1252	1.28 1.32 1.33 1.48 1.33 1.48 0.84 0.71 0.88 0.50 0.91 1.00 1.04 1.16 1.19 1.01 0.76	175.88 164.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 125.70 125.70 125.70 127.30	0.12 0.68 1.29 1.86 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.62 1.44 2.30	1657 1688 1720 1751 1782 1813 1844 1875 1906 1935 1967 1997 2028 2060 2091	1,00 0.88 0.84 0.93 1,12 1,05 1,18 1,30 1,75 1,70 1,61 1,91 1,88 1,95	179.00 157.60 164.00 149.00 158.00 148.50 152.00 156.00 156.00 161.00 158.40 164.20 154.10	1.04 0.43 1.06 0.59 0.83 0.54 1.59 0.50 0.39 1.12 1.05 0.26								

					PUMP & CIRCULATING DATA										
			LINER	STROKE	ASSUMED	PUMP		PUMP		CIRC	JULATING DETAI	LS	·	ANNULAR VEL	oaty
MUD		1	SIZE	LENGTH	EFF	RATE	V	LUMETRIC DA	TA	Standpipe	Motor	HP	DP	DC	DC
PUMPS	MAKE	MODEL	(in)	(in)	(%)	(spm)	(bbis/stk)	(bbls/min)	(gal/min)	(psi)	Differential	(Sq In)	(f/min)	(ft/min)	(ft:min)
NO. 1	National	7P50	6.25	7.75	95.00%	118	0.0736	8.25	347	850	75 - 125	0.31	61	79	87
NO. 2															
NO. 3															
COMBINED													-		

EVERGREEN OPERATING, INC.

RIG CONTACT INFORMATION:

OFFICE TRAILER / FAX: 970 942 7543

CONSULTANT HAND CELL: 303 913 1054

DOGHOUSE: 307 258 7315

PUSHER:

DATE SPUD DATE	6AM DEPTH
8/27/2004 8/16/2004	2590
REPORT NO.	24 HR FOOTAGE
11	315
DRLG CONTRACTOR	DAYS SINCE SPUD
Elenburg, Rig 12	11
CONSULTANT	AFE# API#
John C. Lamb	43-007-30718

ACTIVITY AT REPORT TIME:

Drilling ahead

Dally cost | CUM COST | AFE COSTS | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard | Standard |

СН	RONOLOG	Y OF DAIL	Y OPERATIONS (06:00 -	06:00 HRS)	SLOW	PUMP RA	ATE DATA:	STRING WEIGHT INFORMATION:				
FROM	то	HOURS	1		Depth	SPM	Pressure	Eff BHA Wt	Rotating:	Slackoff:	Hoisting:	
(hrs)	(hrs)	(hrs)	Activity:		2514	54	300	43,000	99,000	96,000	101,000	
06:00	06:45	0.75	Slide 2275 - 2282									
06:45	07:00	0.25	Rig repair - work on pump									
07:00	07:30	0.50	Slide 2282 - 2288									
07:30	10:45	3,25	Rotate 2288 - 2328									
10:45	11:15	0.50	Service rig									
11:15	12:30	1.25	Slide 2328 - 2346									
12:30	14:30	2.00	Rotate 2346 - 2390									
14:30	15:45	1.25	Slide 2390 - 2414									
15:45	19:00	3.25	Rotate 2414 - 2452							4		
19:00	20:15	1.25	Slide 2452 - 2465									
20:15	20:30	0.25	Rig repair - work on pump									
20:30	06:00	9.50	Rotate 2465 - 2590									
									8 9	RECEI	VED 2004	
										CRIME SA	S & MINING	
TOTAL H	IOURS	24.00										

	DAILY	CUM
DESC.	(hrs)	(hrs)
Drill	23.00	167.25
Trip		13.75
Circulate		0.75
Rig Repair	0.50	22.75
Rig Service	0.50	3.75
Dev Survey		
NU / ND		8.50
Cement		
Run Casing		
woc		
OH Logging		
Mix Mud		
MI & RU		6.00
RatHole		
Mouse Hole		
Fishing		
Other		0.50
Coring		
Inspect BHA		
Cut drig line		
Wash & Ream		
Drill Cement		6.25
Test BOPE		1.50
woo		
PU/LD BHA		7.00
insp circ equip		3.50
TOTALS	24.00	241.50

COSTCODE	DESCRIPTION OF DAILY COSTS		DAILY (\$)		CUM (\$)		AFE (\$)	
2030.010	Land, Legal, Title, Survey, Arch, Damages, Permits, Signs	T						
2030.031	Dirtwork, Road, Location, Pits, Liner							
2030.019	Contract Drilling 9480 / day 392.5 / h cond 5071 26,000 mob sfc 36791	\$	9,480	\$	169,232			
2032.001	Water	\$	243	\$	2,619			
2032.013	Drill Bits, Stabilizers, Reamers	1		\$	24,000			
2031.046	Cementing and Services			\$	5,000			
2030.053	Coring and Analysis							
2030.052	Logging							
2030.054	Mud Logging							
2030.037	Rental Equipment	\$	1,501	\$	18,919			
2030.028	Transportation			\$	8,362		•	
2032.004	Mud and Chemicals	\$	1,656	\$	14,720			
	Directional Services, Mud Motors	\$	6,234	\$	66,040			
	Intermediate casing							
2030.035	Contract Labor			\$	2,920			
2030.022	Engineering / Supervision	\$	800	\$	8,800			
2030.099	Intangible Miscellaneous and Contingencies							,
2040.001	Surface Casing			\$	17,790			
2040.004	Production Casing	}		<u></u>				
1011.000	Float Equipment, Shoes, Centralizers							
1041.000	Wellhead Equipment			\$	4,941			
1073.000	Bottom Hole Pump / Gas Lift / Other							
1104.000	Drivehead, Engine / Motor and Hydraulic Pump / Electric Unit							
2040.052 / 2040.055	Valves and Fittings, Small / Large	1						
2040.067	Other Surface Equipment	T						
2040.099	Tangible Miscellaneous and Contingencies							
	TOTAL COSTS	s	19,914	5	343,343	s		-

	11	Date:	08/27/04 Well Na	me:	, <u>DF</u>		ILLING								
4			7					RECOR				·	BIT		
DIT	BIT			1.1.1		DEPTH	DEPTH	FOOTAGE	CUM BIT HOURS	ROP	won	RPM	TORQUE	611	T GRADING
NO.	SIZE			SERIAL	JETS	IN	OUT	(A)	(hrs)	(f/hr)	(#%)	MTR/TBL	(A - Ibe)	In Out Dull Loc	Seals Gge Dull
(*)	(fr)	MFG	TYPE	754840	(32/32/32) 14 / 14 / 14 / 1	(R) 494	1,799	1,305	102.75	12.7	36 - 43	45 / 60	2100 - 2900		EFE 1/8 CI
1	12 1/4	Security	XL18N XL43	10408516		1,799	2,590	791	74.00	10.7	35 - 40	45 / 45-70			
2 .	12 1/4	Security	AL43	10400316	.0,7 107 10	1,,30	-,550	0		#DIV/0!	L				
			1	—				0		#DIV/0!					
			1					0		#DIV/0!					
				T		<u> </u>		0		#DIV/0!					
								0		#DIV/0!		<u> </u>	<u> </u>	<u> </u>	
COMM	IENTS														
RENT	AL EQUIP	MENT				Γ	<u> 1991 - 19</u> I 1995	r	EXTERNAL	CASING L	DATA		тор	воттом	
ITEM	COSTS	COSTS		SIZE	WEIGHT	GRADE	CONIN	DRIFTID	COLLAPSE	YIELD	CAPACITY	LENGTH	SET AT	SET AT	
	(5)	(5)			44.	1 2 1 1			(psi)	(psl)	(bb/ft)	(R)	(ft)	(KKB)	
ing Qtrs	\$ 315	\$ 3,525		30°	NA.	NA						40.00	0.00	40.00	
	\$ 45	\$ 485		13 3/8*	54.5	J55	ST&C	12.459	1,130	2,730	0.15450	500.00	2.00	498.00	
Tank	\$ 60	\$ 660									1				
yohn	\$ 20	\$ 220									<u> </u>	ļ	L	L	
Trailer	\$ 50	\$ 550													
Cleaner	\$ 375	\$ 4,125		, 11		<u> </u>		В(OTTOMHO	LE ASSE			,		
	\$ 100	\$ 1,100	1 to 100 to							MAXIMUM	MINIMUM				
driller	\$ 90	\$ 990	Table of an			1:45			AD SIZE	O.D.	I.D.	LENGTH	1.2.2.	HRS SINCE	
nud clin		\$ 375	DES	CRIPTION OF	BHA		ADER	вох	PIN	(in)	(fn)	(A)	HOURS RUN	INSPECTION	<u> </u>
collars	\$ 196	\$ 4,389		Bit			urity		6 5/8 R	12.250	+	1.25	 	 	
k Sub	\$ 250	\$ 2,500	7/8 Lob	4 Stage M	ud Motor		DI	6 5/8 R	6 5/8 R	8.000	2.000	29.52 3.02		 	
				Float Sub	Ct		DI	6 5/8 R 6 5/8 R	6 5/8 R 6 5/8 R	8.000	3.000 2.688	11.99		<u> </u>	
				iffith Shock			idle DI	6 5/8 R	6 5/8 R	8.000	3.250	30.58			
				onel Drill Co Off Sub ある			DI	6 5/8R	6 5/8 R	7.750	3.750	8.94	<u> </u>		
			- riang	Off Sub & C	p au		DI	6 5/8 H90	6 5/8 R	8.000	3.250	2.35			
			7 .	3/4° Drill C	ollars		ig	6 5/8 H90	6 5/8 H90	7.750	2.250	340.02			
		\vdash	 	XO			DI	4 1/2 XH	6 5/8 H90	7.750	2.625	2.35			
OTALS	\$ 1,501	\$ 18,919	10 -	6 1/2 Drill C	collars		ig	4 1/2 XH	4 1/2 XH	6.500	2.250	309.53			
	,					Januaran T		G MUD R						ester Po	Trulii Yali
AMPLE		MUID	FUNNEL.	r 1		GEL.	FRITRATE		CAKE		SAND			ris V til	
DEPTH	TIME	WT.	VISCOSITY	PV/YP	KCL	STRENGTH	API	CALCIUM	THICKNESS	50UD5	CONTENT	pН	CHLORIDES	ALKALINETY	LCM
(R)	(hh:mm)	(PPG)	(sec/qt)		(*)	(Ib/100 ft2)	(ml/30 min)	(ppm)	(/32 ln)	(% vol)	(% vol)		(ppm)	Pf/Mf	lb/gal
2,300	09:00	9.30	40	8 / 26	2.60	7 / 15	15.5	20	2	6.2	1/4	10.0	15,000	.9/3.8	
2,433	17:00	9.30	40	10 / 17	1.80	7 / 17	17.0	20	2	6.0	1/4	9.5	13,000	.7 / 3.9	
2,585	05:30	9.40	43				16.0				1	10.0			
politica de Partir	<u> </u>			ı		DA	ILY MUD	COST & I	NVENTOR	Y					TOTAL
			BARITE	QUICK GEL	CAUSTIC	LIME	SODA ASH	UNIDRULL	SOLKWICK	PACR	PHPA	CEDAR	TRUCKING		costs (\$)
COST	est of Lister'	999 1 35335 12	(sx)	(sx)	(s×)	(sx)	(ex.)	(ax)	(ex.)	(*x)	(g≓)	(ex)	<u> </u>		
RTING INVE	ENTORY		120	I											
ENTORY RE											 				
ED LAST 24 DING INVEN				——		 -									
LY MUD CO											ļ				
EVIOUS CUM	MULATIVE COST												-		
WOLATIVE N	100 COO1														
5111111111							MUDIC	GGED D	DORT		5 / 6 / 6 / 6 / 6 / 6 / 6 / 6 / 6 / 6 /				
MUD	GAS DATA (In C	Srvits)	SHOW INTER	tval.	RATE	OF PENETRATI	ON		SHOW GAS DA						
BACK	CONIN	TRIP	FROM	10	BEFORE	DURING	ON AFTER	BEFORE	SHOW GAS DA DURING	AFTER	Formation '	Tops:	possible Pr	rice River 2100'	
BACK							ON		SHOW GAS DA		Sample per	centages:	possible Pr	rice River 2100'	
	CONIN	TRIP	FROM	10	BEFORE	DURING	ON AFTER	BEFORE	SHOW GAS DA DURING	AFTER		centages:	possible Pr	rice River 2100'	
BACK	CONIN	TRIP	FROM	10	BEFORE	DURING	ON AFTER	BEFORE	SHOW GAS DA DURING	AFTER	Sample per	centages:	possible Pr	rice River 2100'	
BACK	CONIN	TRIP	FROM	10	BEFORE	DURING	ON AFTER (R)	BEFORE	SHOW GAS DA DURNING UNITS	AFTER	Sample per	centages:	possible Pr	ice River 2100'	
BACK ROUND	GAS GAS	TRIP GAS	FROM (6)	(A)	BEFORE	DURING	ON AFTER (R)	BEFORE	SHOW GAS DA DURNING UNITS	AFTER	Sample per	centages:	possible Pr	rice River 2100'	DLAngle
BACK ROUND Depth 538	GAS Daviation 1.03	TRIP GAS Azimuth 184.79	FROM (R) DL Angle 0.19	Depth 1407	BEFORE (N) Deviation 0.69	Azimuth	ON AFTER (N) DEVIAT DL Angle 1.35	BEFORE UNITS ION SUI Depth 2244	Deviation 2.27	AFTER LINITS Azimuth 147.80	Sample per Sample Desc DI, Angle 0.66	centages: ription:			DL Angle
BACK ROUND Depth 538 566	GAS Daviation 1.03 1.22	Azimuth 164.79 189.53	PROM (N) DL Angle 0.19 0.76	Depth 1407 1438	Deviation 0.69 0.75	Azimuth 190.80 190.50	ON AFTER (R) DEVIAT DL Angle 1.35 0.39	BEFORE UNITS ION SUI Depth 2244 2275	CVEYS Daviation 2.27 2.24	AFTER LINTS Azimuth 147.80 156.50	Sample per Sample Desc DL Angle 0.66 1.11	centages: ription:			DL'Angle
BACK ROUND Depth 538 566 602	Deviation 1.03 1.22 1.20	Azimuth 184.79 189.53 186.87	PROM (N) DL Angle 0.19 0.76 0.17	Depth 1407 1438 1468	Deviation 0.69 0.75 0.73	Azimuth 190.80 190.50 201.30	DEVIAT DL Angle 1.35 0.39 0.47	DEFONE UNITS ION SUI Depth 2244 2275 2306	CVEYS Deviation 2.27 2.24 2.06	Azimuth 147.80 156.50 158.70	Sample per Sample Desc DL Angle 0.66 1.11 0.64	centages: ription:			DL Angle
Depth 538 566 602 633	Deviation 1.03 1.22 1.20	Azimuth 184.79 186.87 188.91	DL Angle 0.19 0.76 0.77 0.21	Depth 1407 1438 1468 1499	Deviation 0.69 0.75 0.73	Azimuth 190.80 190.50 201.30 218.50	DEVIAT DL Angle 1.35 0.39 0.47 0.83	Depth 2244 2275 2306 2337	RVEYS Deviation 2.27 2.24 2.06 2.05	Azimuth 147.80 156.50 158.70 157.60	Sample per Sample Desc DL Angle O.66 1.11 0.64 0.13	centages: ription:			DLAngie
5.00 Septh 5.38 5.66 6.02 6.33 6.64	Deviation 1.03 1.22 1.20 1.25 1.34	Azimuth 184.79 189.53 186.87 188.91 180.49	PL Angle 0.19 0.76 0.17 0.21	Depth 1407 1438 1468 1499 1532	Deviation 0.69 0.75 0.73 0.84 0.51	Azimuth 190.80 190.50 201.30 218.50 206.70	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08	BEFORE CATS ION SUI Depth 2244 2275 2306 2337 2367	CVEYS Deviation 2.27 2.24 2.06 2.05 1.95	Azimuth 147.80 156.50 158.70 163.20	Dt. Angle 0.66 1.11 0.64 0.73	centages: ription:			DL Angle
538 566 602 633 664 695	Deviation 1.03 1.22 1.20 1.25 1.34 1.26	Azimuth 124.79 189.53 186.87 188.91 180.49 180.29	PL Angle 0.19 0.76 0.17 0.21 0.88 0.26	Depth 1407 1438 1468 1499 1532	Deviation 0.69 0.75 0.73 0.84 0.51 0.83	Azimuth 190.80 190.50 201.30 218.50 206.70	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08	Depth 2244 2275 2306 2337 2367 2399	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95	Azimuth 147.80 156.50 157.60 163.20 170.70	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62	centages: ription:			DL'Angle
Sapth 538 566 602 633 664 695 727	Deviation 1.03 1.22 1.20 1.25 1.34 1.28 1.32	Azimuth 184.79 189.53 186.87 188.91 180.49 180.29 175.88	DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36	Depth 1407 1438 1468 1498 1532 1563 1595	Deviation 0.89 0.75 0.73 0.84 0.51 0.83	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20	DEVIAT DL Angle 1,35 0.39 0.47 0.83 1.10 1.13 0.29	BEFORE UNITS ION SUI Depth 2244 2275 2306 2337 2367 2399 2429	DURING LIVES CHAIS RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.44 1.22	Azimuth 147.80 156.50 158.70 163.20 170.70	DL Angle 0.66 1.11 0.64 0.73 0.73 1.62 0.87	centages: ription:			DLAngle
septh. 538 566 602 633 664 695 727 757	Deviation 1.03 1.22 1.34 1.26 1.32 1.34	Azimuth 184.79 189.53 186.87 18.91 180.29 175.88 184.40	PL Angle 0.19 0.76 0.17 0.21 0.88 0.26 0.36 0.89	Depth 1407 1438 1468 1499 1532 1563 1595 1626	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 196.70	DEVIAT DL Angle 1,35 0,39 0,47 0,83 1,08 1,13 0,29 0,43	Depth 2244 2275 2306 2337 2367 2399	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95	Azimuth 147.80 156.50 157.60 163.20 170.70	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62	centages: ription:			DL Angle
538 566 602 633 664 695 727 757 787	Deviation 1.03 1.22 1.29 1.26 1.34 1.33	Azimuth 184.79 189.53 186.87 188.91 180.49 180.29 175.88 184.40 162.92	DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36	Depth 1407 1438 1468 1498 1532 1563 1595	Deviation 0.89 0.75 0.73 0.84 0.51 0.83	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20	DEVIAT DL Angle 1,35 0.39 0.47 0.83 1.10 1.13 0.29	Depth 2244 2275 2397 2367 2429 2460	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.42 0.98	Azimuth 147.80 156.50 157.60 163.20 170.70 170.10	Dt. Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.84 0.84	centages: ription:			DLAngle
Depth 538 566 602 633 664 695 727 757 787 817	Deviation 1.03 1.22 1.20 1.34 1.33 1.46	Azimuth 184.79 189.53 186.87 18.91 180.29 175.88 184.40	PL Angle 0.19 0.76 0.17 0.21 0.26 0.36 0.36 0.39 0.12	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657	Deviation 0.69 0.75 0.73 0.84 0.85 0.85 0.81 1.20	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 196.70 202.10	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.13 0.29 0.43 1.29	Depth 2244 2275 2306 2337 2367 2399 2429 2460 2492	DIFFING CAS DA DURING CHAIS CH	Azimuth 147.80 156.50 157.60 163.20 170.70 171.10	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87	centages: ription:			DLAngle
Papth 538 566 602 633 664 695 727 757 787 817 844	Deviation 1.03 1.22 1.29 1.26 1.34 1.33	Azimuth 184.79 189.53 186.87 188.91 180.49 180.29 175.88 164.40 162.92 156.82	DL Angle 0.19 0.76 0.17 0.21 0.88 0.26 0.36 0.89 0.12	Depth 1407 1438 1468 1499 1592 1563 1595 1626 1657 1688	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00	Azimuth 190.50 201.30 218.50 206.70 196.70 202.10	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.10 1.13 0.29 0.43 1.29 0.65	Depth 2244 2275 2306 2337 2367 2399 2429 2460 2492	DIFFING CAS DA DURING CHAIS CH	Azimuth 147.80 156.50 157.60 163.20 170.70 171.10	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87	Centages: ription:			DLAngie
Papth 538 566 602 633 664 695 727 757 787 817 844 876	Deviation 1.03 1.22 1.20 1.34 1.34 1.33 1.44 1.43	Azimuth 184.79 189.53 186.87 180.49 180.29 175.88 184.40 162.92 156.82 143.19	PL Angle 0.19 0.76 0.17 0.21 0.26 0.36 0.39 0.12 0.68 1.29 1.88	Depth 1407 1438 1468 1499 1595 1626 1657 1688 1720 1751 1782	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 196.70 202.10 179.00 157.60 164.00	DEVIAT DL Angle 1,35 0,39 0,47 0,83 1,08 1,08 1,08 1,13 0,29 0,43 1,29 0,65 1,23 1,04 0,43	Depth 2244 2275 2306 2337 2367 2399 2429 2460 2492	DIFFING CAS DA DURING CHAIS CH	Azimuth 147.80 156.50 157.60 163.20 170.70 171.10	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87	Centages: ription:			DL Angle
Depth 538 566 602 633 664 695 727 757 787 817 844 8476 907	Deviation 1.03 1.22 1.20 1.26 1.34 1.33 1.48 1.43 0.64	Azimuth 184.79 189.53 186.87 188.91 180.29 175.88 184.40 162.92 156.82 143.19 137.08	DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.88 1.29 1.88 0.51	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1688 1720 1751 1782 1813	Deviation 0.69 0.75 0.73 0.84 0.51 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 196.70 202.10 179.00 157.60 164.00	DEVIAT DL. Angle 1.35 0.39 0.47 1.08 1.13 0.29 0.43 1.23 1.04 0.43 1.29 1.04 1.13 1.09	Depth 2244 2275 2306 2337 2367 2399 2429 2460 2492	DIFFING CAS DA DURING CHAIS CH	Azimuth 147.80 156.50 157.60 163.20 170.70 171.10	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87	Centages: ription:			DLAngle
BACK ROUND 5538 5566 602 633 727 757 757 757 757 757 757 757 757 757	Deviation 1.03 1.22 1.20 1.25 1.34 1.28 1.32 1.33 1.48 1.43 0.84 0.71 0.88 0.80	TRIP GAS Azimuth 184.79 189.53 186.87 188.91 180.29 175.83 184.40 162.92 156.82 143.19 137.08 130.59 1107.94	PROM (N) (N) (N) (N) (N) (N) (N) (N) (N) (N)	Depth. 1407 1438 1468 1498 1592 1563 1595 1626 1657 1688 1720 1751 1782 1813 1844	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 196.70 202.10 179.00 157.60 164.00 149.00 155.00	DEVIAT DL Angle 1,35 0,39 0,47 0,83 1,08 1,13 0,29 0,43 1,29 0,65 1,23 1,04 0,43 1,04 0,43 1,05	Depth 2244 2275 2306 2337 2367 2399 2429 2460 2492	DIFFING CAS DA DURING CHAIS CH	Azimuth 147.80 156.50 157.60 163.20 170.70 171.10	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87	Centages: ription:			DL'Angle
BACK ROUND Depth 538 566 602 633 664 695 7727 777 787 787 817 817 844 845 997 996	Deviation 1.03 1.22 1.20 1.25 1.34 1.28 1.32 1.40 1.40 0.71 0.86 0.50 0.91	Azimuth 184.79 189.53 186.87 188.91 180.29 175.88 184.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50	PROM (N) (N) (N) (N) (N) (N) (N) (N) (N) (N)	Depth 1407 1438 1468 1499 1595 1626 1657 1688 1720 1751 1782 1813 1814 1875	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.93 1.12 1.00 1.00 1.00 1.00 1.12	Asimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 196.70 202.10 179.00 157.60 164.00 149.00 149.50	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 0.43 1.06 0.43 1.06 0.43	Depth 2244 2275 2306 2337 2367 2399 2429 2460 2492	DIFFING CAS DA DURING CHAIS CH	Azimuth 147.80 156.50 157.60 163.20 170.70 171.10	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87	Centages: ription:			DLAngie
Papth 538 664 664 665 7727 787 787 817 844 8997 9936 9971 1034 1036 666	Deviation 1.03 1.22 1.20 1.34 1.32 1.34 1.39 1.44 1.43 0.84 0.71 0.86 0.50 0.91 1.00	Azimuth 184.79 189.53 186.87 189.91 180.49 150.29 175.88 184.40 162.92 143.19 137.08 130.59 112.85 107.94 109.50 120.10	PROM (tt) DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.39 0.12 0.88 1.29 1.88 0.51 0.95 1.04 0.65	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1688 1720 1751 1782 1813 1844 1875 1844 1875	Deviation 0.69 0.75 0.73 0.84 0.51 0.85 0.81 1.20 0.88 0.84 0.94 1.12 1.05 1.18 1.30	Azimuth 190.80 190.50 201.30 218.50 196.70 196.70 197.80 1179.00 1179.00 1179.00 1149.00 1149.00 1152.00 1152.00 1152.00	DEVIAT DL. Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.43 1.29 0.65 1.23 1.04 0.43 1.06 0.59 0.83	Depth 2244 2275 2306 2337 2367 2399 2429 2460 2492	DIFFING CAS DA DURING CHAIS CH	Azimuth 147.80 156.50 157.60 163.20 170.70 171.10	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87	Centages: ription:			DL Angle
Papth. 538 558 664 633 664 637 777 787 787 787 844 844 876 997 997 997 997 997 997	Deviation 1.03 1.22 1.20 1.25 1.34 1.34 1.33 1.48 1.33 0.84 0.71 0.56 0.50 0.91 1.00	TRIP GAS Azimuth 184.79 189.53 186.87 188.91 180.29 175.88 164.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70	PROM (tt) DL Angle 0.19 0.76 0.77 0.21 0.88 0.26 0.36 0.39 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.65	Depth 1407 1438 1468 1592 1563 1595 1626 1627 1751 1782 1813 1844 1875 1906 1935	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.18 1.30	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 196.70 202.10 197.90 157.60 148.00 149.00 158.00 149.00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 0.43 1.06 0.59 0.83	Depth 2244 2275 2306 2337 2367 2399 2429 2460 2492	DIFFING CAS DA DURING CHAIS CH	Azimuth 147.80 156.50 157.60 163.20 170.70 171.10	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87	Centages: ription:			DL'Angle
Papth 538 662 633 664 695 727 737 7817 844 844 847 769 997 11034 11066 81097 11128	Deviation 1.03 1.22 1.20 1.25 1.34 1.33 1.48 1.49 0.84 0.71 0.86 0.50 0.91 1.00 1.00 1.00 1.18	Azimuth 184.79 189.53 186.87 188.91 180.29 175.88 184.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 132.57	PROM (N) (N) (N) (N) (N) (N) (N) (N) (N) (N)	Depth 1407 1438 1468 1499 1592 1563 1595 1688 1770 1751 1782 1813 1844 1875 1906 1935	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.18 1.30 1.75	Asimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 196.70 202.10 179.00 157.60 164.00 145.00 146.50 150.00 161.00	DEVIAT DL Angle 1,35 0,39 0,47 0,83 1,08 1,13 0,29 0,43 1,29 0,65 1,23 1,04 0,43 1,06 0,43 1,06 0,43 1,06 0,43 1,06 0,43 1,06 0,43 1,06 0,55 1,06 1,06 1,06 1,06 1,06 1,06 1,06 1,06	Depth 2244 2275 2306 2337 2367 2399 2429 2460 2492	DIFFING CAS DA DURING CHAIS CH	Azimuth 147.80 156.50 157.60 163.20 170.70 171.10	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87	Centages: ription:			DEAngle
5586 602 5586 602 664 695 7727 737 737 737 737 737 739 817 844 817 844 996 990 990 990 990 990 990 990 990 990	Deviation 1.03 1.22 1.20 1.25 1.34 1.32 1.44 1.43 0.84 0.57 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	TRIP GAS Azimuth 184.79 189.53 186.87 188.91 180.49 150.29 175.88 184.40 162.92 143.19 137.08 130.59 112.55 107.94 109.50 120.10 126.70 132.57	PROM (ts) DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1688 1720 17751 1782 1813 1844 1875 1906 1935 1997	Deviation 0, 69 0, 75 0, 73 0, 84 0, 51 0, 83 0, 84 0, 51 1, 20 1, 100 0, 88 0, 84 0, 84 1, 12 1, 105 1, 118 1, 30 1, 75 1, 77 1, 61	Azimuth 190.80 190.50 201.30 218.50 196.70 196.70 197.80 1179.00 157.60 1187.2	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.23 1.04 0.43 1.06 0.59 0.83 1.06 0.59 0.83 0.54 1.59	Depth 2244 2275 2306 2337 2367 2399 2429 2460 2492	DIFFING CAS DA DURING CHAIS CH	Azimuth 147.80 156.50 157.60 163.20 170.70 171.10	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87	Centages: ription:			DL Angle
8ACK ROUND 1998 5566 602 664 695 727 737 737 737 737 737 737 737 737 737	Deviation 1.03 1.22 1.20 1.25 1.34 1.26 1.33 1.40 1.33 1.40 0.84 0.71 0.86 0.50 0.91 1.00 1.04 1.16 1.19 1.01	TRIP GAS Azimuth 184.79 189.53 186.87 188.91 180.29 175.88 164.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51	PROM (tt) DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.39 0.12 0.68 1.29 1.68 0.51 0.95 1.04 0.65 0.62 0.40 0.53	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1857 1688 1720 1751 1782 1813 1844 1875 1906 1935 1967 2028	Deviation 0.69 0.75 0.73 0.84 0.51 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.18 1.30 1.75 1.70 1.61 1.91	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 196.70 202.10 197.90 157.60 148.50 148.50 158.00 161.00 151.00 161.00 161.00 161.00 161.00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.43 1.04 0.43 1.06 0.59 0.83 0.54 1.59 0.50 0.38	Depth 2244 2275 2306 2337 2367 2399 2429 2460 2492	DIFFING CAS DA DURING CHAIS CH	Azimuth 147.80 156.50 157.60 163.20 170.70 171.10	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87	Centages: ription:			DL Angle
BACK ROUND 538 538 602 633 664 695 727 737 787 817 844 8576 997 998 997 11034 1066 1159 1159	Deviation 1.03 1.22 1.20 1.25 1.26 1.34 1.33 1.48 1.43 0.84 0.71 0.86 0.91 1.00 1.04 1.18 1.19 1.10 0.76	TRIP GAS Azimuth 184.79 189.53 186.87 188.91 180.49 180.29 175.88 184.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70	PROM (8) DL Angle 0.19 0.76 0.17 0.21 0.88 0.26 0.36 0.36 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.62 1.48	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1688 17751 1782 1813 1844 1875 1906 1935 1967 1997 2028 2060	Deviation 0.69 0.75 0.73 0.84 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.18 1.30 1.75 1.76 1.70 1.61	Azimuth 190.50 201.30 218.50 206.70 194.00 187.20 196.70 202.10 197.00 187.20 196.70 1	DEVIAT DL Angle 1,35 0,39 0,47 0,83 1,08 1,13 0,29 0,43 1,12 0,65 1,23 1,04 0,43 1,08 0,65 1,04 0,43 1,09 0,65 1,00 0,65 1,04 0,10 0,08 0,08 0,08 0,08 0,08 0,08 0,08	Depth 2244 2275 2306 2337 2367 2399 2429 2460 2492	DIFFING CAS DA DURING CHAIS CH	Azimuth 147.80 156.50 157.60 163.20 170.70 171.10	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87	Centages: ription:			DEAngle
5586 602 5586 602 664 695 7727 7737 787 787 787 787 787 787 787 787 7	Deviation 1.03 1.22 1.20 1.25 1.34 1.32 1.34 1.33 1.43 0.84 0.51 0.50 0.50 0.50 1.00 1.00 1.00 1.00	Azimuth 184.79 189.53 186.87 18.8.91 180.49 175.88 184.40 162.92 175.82 143.19 137.08 130.59 112.85 107.94 19.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75	PROM (tt) DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.62 1.48 2.30	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1688 1720 1751 1782 1813 1644 1875 1906 1935 1967 1997 2028 2060 2091	Deviation 0,89 0,75 0,73 0,84 0,51 0,83 0,81 1,20 1,00 0,88 0,84 1,12 1,05 1,118 1,30 1,75 1,76 1,70 1,61 1,91 1,88 1,95	Azimuth 190.80 190.50 201.30 218.50 196.70 194.00 187.20 196.70 197.00 1179.00 155.00 155.00 155.00 155.00 155.00 155.40 164.20 155.40 164.20 155.40 164.20 155.40 164.20 155.40 164.20 155.40 164.20 155.40 164.20 155.40 164.20 155.40 164.20 155.40 164.20 155.40 164.20 155.40 164.20 155.40 164.20 155.40 164.20 155.40 164.20 155.40 155.40 155.50	DEVIAT DL. Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.23 1.04 0.43 1.06 0.59 0.54 1.59 0.33 0.54 1.59 0.39 1.12 1.05 0.26	Depth 2244 2275 2306 2337 2367 2399 2429 2460 2492	DIFFING CAS DA DURING CHAIS CH	Azimuth 147.80 156.50 157.60 163.20 170.70 171.10	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87	Centages: ription:			DLAngle
558. 556. 602. 603. 664. 695. 7727. 7757. 787. 814. 876. 997. 1034. 10097. 11129. 11191.	Deviation 1.03 1.22 1.20 1.25 1.34 1.33 1.44 0.71 0.84 0.71 1.00 1.00 1.00 1.00 1.00 1.00 1.00	TRIP GAS Azimuth 184.79 189.53 186.87 188.91 180.29 175.88 164.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75 203.90	PROM (tt) DL Angle 0.19 0.76 0.17 0.68 0.26 0.36 0.39 0.12 0.88 1.29 1.86 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.62 1.48 2.30 0.51	Depth 1407 1438 1468 1499 1532 1563 1595 1720 1751 1782 1513 1844 1875 1906 1935 1967 1997 2028 2060 2091 2120	Deviation 0.89 0.75 0.73 0.84 0.51 1.20 1.00 1.12 1.05 1.18 1.30 1.75 1.70 1.61 1.91 1.88 1.95 1.74	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 196.70 197.00 157.60 164.00 145.50 158.00 165.00 161.00 158.00 164.00 158.00 164.00 158.00 164.00 158.00 164.00	DEVIAT DLAngle 1.35 0.39 0.47 1.08 1.108 1.13 0.29 0.43 1.29 0.43 1.29 0.65 1.23 1.04 0.43 1.09 0.59 0.50 0.50 0.50 0.50 0.50 0.50 0	Depth 2244 2275 2306 2337 2367 2399 2429 2460 2492	DIFFING CAS DA DURING CHAIS CH	Azimuth 147.80 156.50 157.60 163.20 170.70 171.10	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87	Centages: ription:			DL'Angle
BACK ROUND 10 10 10 10 10 10 10 1	Deviation 1.03 1.22 1.20 1.26 1.34 1.33 1.48 1.43 0.64 0.71 0.85 0.50 0.91 1.00 1.18 1.19 1.00 1.00 1.00 1.00 1.00 1.00 1.00	TRIP GAS Azimuth 184.79 189.53 186.87 188.87 188.91 180.29 175.88 184.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75 203.90 173.03	PROM (8) DL Angle 0.19 0.76 0.17 0.21 0.88 0.26 0.36 0.36 0.40 0.51 0.95 0.80 0.51 0.95 0.82 0.40 0.53 0.33 0.33 0.62 1.48 2.30 0.51	To (#) Depth. 1407 1438 1468 1498 1592 1563 1595 1626 1657 1688 1720 1751 1782 1813 1813 1814 1875 1906 1935 1967 1997 2028 2080 2091 2152	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.64 0.93 1.12 1.05 1.18 1.30 1.76 1.70 1.61 1.91 1.88 1.95 1.74	Azimuth 190.80 190.50 201.30 218.50 201.30 218.50 202.10 194.00 187.20 196.70 202.10 195.760 146.00 145.00 155.60 161.00 155.40 164.20 154.10	DEVIAT DL Angle 1,35 0,39 0,47 0,83 1,08 1,13 0,29 0,43 1,12 0,65 1,23 1,04 0,43 1,09 0,65 1,23 1,04 0,43 1,05 0,65 1,23 1,04 0,43 1,05 0,65 1,04 1,05 0,08 1,15 0,08	Depth 2244 2275 2306 2337 2367 2399 2429 2460 2492	DIFFING CAS DA DURING CHAIS CH	Azimuth 147.80 156.50 157.60 163.20 170.70 171.10	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87	Centages: ription:			DEAngle
500 ACK ACK ACK ACK ACK ACK ACK ACK ACK ACK	Deviation 1.03 1.22 1.20 1.25 1.34 1.32 1.34 1.33 1.43 0.84 0.71 0.50 0.50 0.91 1.00 1.00 1.00 1.00 1.00 1.00 1.0	TRIP GAS Azimuth 184.79 189.53 186.87 188.91 180.49 150.29 175.88 184.40 162.92 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 137.30 141.51 137.30 141.51 125.70 235.75 203.90 173.03	PROM (ts) DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.62 1.48 2.30 0.51 0.58 0.25	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1688 1720 1751 1782 1813 1644 1875 1906 1935 1907 2028 2060 2091 2120 2133	Deviation 0, 69 0, 75 0, 73 0, 84 0, 51 0, 83 0, 84 0, 51 1, 20 1, 100 0, 88 0, 84 1, 12 1, 105 1, 118 1, 30 1, 75 1, 70 1, 61 1, 91 1, 88 1, 95 1, 74 1, 99 2, 03	Azimuth 190.80 190.50 201.30 218.50 196.70 194.00 157.60 157.60 155.00 1	DEVIAT DL. Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.23 1.04 0.43 1.06 0.59 0.65 1.23 1.04 0.43 1.06 0.59 0.83 1.06 0.59 0.83 0.54 1.59 0.83 0.54 1.59 0.83 0.54 0.59 0.83 0.50 0.39 0.10 0.80 0.80 0.80 0.80 0.80 0.80	Depth 2244 2275 2306 2337 2367 2399 2429 2460 2492	DIFFING CAS DA DURING CHAIS CH	Azimuth 147.80 156.50 157.60 163.20 170.70 171.10	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87	Centages: ription:			DLAngie
MCK (60MD) Papth (538) 538 (566) 668 (602) 668 (602) 668 (602) 7727 (757) 787 (787) 787 (787) 787 (787) 787 (787) 787 (787) 787 (787) 787 (787) 787 (787) 787 (787) 781 (788) 844 (788) 857 (789) 1003 (788) 1004 (788) 1005 (788) 1007 (788) 1007 (788) 1008 (788)	Deviation 1.03 1.22 1.20 1.26 1.34 1.33 1.48 1.43 0.64 0.71 0.85 0.50 0.91 1.00 1.18 1.19 1.00 1.00 1.00 1.00 1.00 1.00 1.00	TRIP GAS Azimuth 184.79 189.53 186.87 188.87 188.91 180.29 175.88 184.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75 203.90 173.03	PROM (8) DL Angle 0.19 0.76 0.17 0.21 0.88 0.26 0.36 0.36 0.40 0.51 0.95 0.80 0.51 0.95 0.82 0.40 0.53 0.33 0.33 0.62 1.48 2.30 0.51	To (#) Depth. 1407 1438 1468 1498 1592 1563 1595 1626 1657 1688 1720 1751 1782 1813 1813 1814 1875 1906 1935 1967 1997 2028 2080 2091 2152	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.64 0.93 1.12 1.05 1.18 1.30 1.76 1.70 1.61 1.91 1.88 1.95 1.74	Azimuth 190.80 190.50 201.30 218.50 201.30 218.50 202.10 194.00 187.20 196.70 202.10 195.760 146.00 145.00 155.60 161.00 155.40 164.20 154.10	DEVIAT DL Angle 1,35 0,39 0,47 0,83 1,08 1,13 0,29 0,43 1,12 0,65 1,23 1,04 0,43 1,09 0,65 1,23 1,04 0,43 1,05 0,65 1,23 1,04 0,43 1,05 0,65 1,04 1,05 0,08 1,15 0,08	Depth 2244 2275 2306 2337 2367 2399 2429 2460 2492	DIFFING CAS DA DURING CHAIS CH	Azimuth 147.80 156.50 157.60 163.20 170.70 171.10	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87	Centages: ription:			DLAngie
500 ACK ACK ACK ACK ACK ACK ACK ACK ACK ACK	Deviation 1.03 1.22 1.20 1.25 1.34 1.32 1.34 1.33 1.43 0.84 0.71 0.50 0.50 0.91 1.00 1.00 1.00 1.00 1.00 1.00 1.0	TRIP GAS Azimuth 184.79 189.53 186.87 188.91 180.49 150.29 175.88 184.40 162.92 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 137.30 141.51 137.30 141.51 125.70 235.75 203.90 173.03	PROM (ts) DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.62 1.48 2.30 0.51 0.58 0.25	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1688 1720 1751 1782 1813 1644 1875 1906 1935 1907 2028 2060 2091 2120 2133	Deviation 0, 69 0, 75 0, 73 0, 84 0, 51 0, 83 0, 84 0, 51 1, 20 1, 100 0, 88 0, 84 1, 12 1, 105 1, 118 1, 30 1, 75 1, 70 1, 61 1, 91 1, 88 1, 95 1, 74 1, 99 2, 03	Azimuth 190.80 190.50 201.30 218.50 196.70 194.00 157.60 157.60 155.00 1	DEVIAT DL. Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.23 1.04 0.43 1.06 0.59 0.65 1.23 1.04 0.43 1.06 0.59 0.83 1.06 0.59 0.83 0.54 1.59 0.83 0.54 1.59 0.83 0.54 0.59 0.83 0.50 0.39 0.10 0.80 0.80 0.80 0.80 0.80 0.80	Depth 2244 2275 2306 2337 2367 2399 2429 2460 2492	DIFFING CAS DA DURING CHAIS CH	Azimuth 147.80 156.50 157.60 163.20 170.70 171.10	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87	Centages: ription:			DLAngle
8ACK ROUND 5538 5586 602 664 695 7727 737 737 737 737 737 739 739 741 1068 1097 1098 11159 11159 11159 11159 11159 11159 11221 1225 1225	Deviation 1.03 1.22 1.20 1.25 1.34 1.32 1.34 1.33 1.43 0.84 0.71 0.50 0.50 0.91 1.00 1.00 1.00 1.00 1.00 1.00 1.0	TRIP GAS Azimuth 184.79 189.53 186.87 188.91 180.49 150.29 175.88 184.40 162.92 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 137.30 141.51 137.30 141.51 125.70 235.75 203.90 173.03	PROM (ts) DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.62 1.48 2.30 0.51 0.58 0.25	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1688 1720 1751 1782 1813 1644 1875 1906 1935 1907 2028 2060 2091 2120 2133	Deviation 0, 69 0, 75 0, 73 0, 84 0, 51 0, 83 0, 84 0, 51 1, 20 1, 100 0, 88 0, 84 1, 12 1, 105 1, 118 1, 30 1, 75 1, 70 1, 61 1, 91 1, 88 1, 95 1, 74 1, 99 2, 03	Azimuth 190.80 190.50 201.30 218.50 218.50 194.00 187.20 194.00 157.60 157.60 158.00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 0.43 1.09 0.83 1.09 0.83 1.09 0.83 1.09 0.83 1.09 0.83 0.99 0.83 0.99 0.83 0.99 0.83 0.99 0.83 0.99 0.83 0.99 0.99 0.99 0.99 0.99 0.99 0.99 0.9	Depth 2244 2275 2309 2429 2450 2492 2523	DIFFING CAS DA DURING CHAIS CH	Azimuth 147.80 156.50 157.60 163.20 170.70 171.10	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87	Centages: ription:			DLAngle
BACK ROUND STATE OF THE PROPERTY OF THE PROPER	Deviation 1.03 1.22 1.20 1.25 1.34 1.32 1.34 1.33 1.43 0.84 0.51 1.00 1.00 1.00 1.00 1.00 1.00 1.00	TRIP GAS Azimuth 184.79 189.53 186.87 188.91 180.49 150.29 175.88 184.40 162.92 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 137.30 141.51 137.30 141.51 125.70 235.75 203.90 173.03	FROM (8) DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.62 1.48 0.51 0.51 0.52 0.40 0.53 0.62 1.48 0.51 0.51 0.52 0.40 0.53	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1638 1720 1751 1782 1813 1844 1875 2028 2080 2091 2120 2152 2133 2213	Deviation (%) Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.84 0.51 1.20 1.00 0.88 0.84 1.12 1.05 1.105 1.105 1.75 1.70 1.61 1.91 1.88 1.95 1.74 1.99 2.03 2.42	CLIRINS (b) Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 196.70 202.10 179.00 157.60 164.00 155.00 146.50 155.00 161.00 155.00 164.20 155.10 155.20 148.60 145.10 155.20	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.23 1.04 0.43 1.29 0.55 1.23 1.04 0.43 1.06 0.59 0.50 1.12 1.06 0.59 0.83 1.12 1.06 0.59 0.83 1.15 0.83 0.54 1.59 0.83 0.54 1.59 0.30 0.54 1.59 0.31 1.55 0.39 1.12 0.65 0.13 1.55 0.13 0.86 0.13 0.86 0.13 0.86 0.13	Depth 2244 2275 2306 2337 2367 2392 2460 2492 2523	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.42 0.96 0.98 0.99 0.91	Arter LNATS Azimuth 147.80 156.50 158.70 157.60 163.20 170.10 171.70 171.90 171.20	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87	Centages: ription: Depth Depth	Deviation	Azimuth	OCITY
BACK ROUND Dapth 556 602 603 664 695 727 787 787 787 817 844 878 997 1034 1066 1069 11129 11221 1221 1221 1222 1314 1346 1347	Deviation 1.03 1.22 1.20 1.25 1.34 1.34 1.33 1.48 1.33 1.48 0.71 0.56 0.50 0.91 1.00 1.00 1.00 1.00 1.00 1.00 1.0	TRIP GAS Azimuth 184.79 189.53 186.87 188.91 180.49 180.29 175.83 184.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75 203.90 173.03 172.10 163.30	FROM (8) (10) DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.38 0.29 0.12 0.88 1.29 1.04 0.65 1.04 0.65 0.65 0.62 0.40 0.53 0.62 1.48 2.30 0.51 0.58 0.28 0.30	TO (N) Depth 1407 1438 1468 1499 1532 1563 1595 1626 1857 1688 1720 1751 1752 1813 1844 1875 1906 1935 1967 1997 2028 2080 2091 2120 2152 2133	Deviation (%) Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 1.00 1.12 1.05 1.18 1.30 1.75 1.70 1.81 1.91 1.88 1.95 1.74 1.99 2.03 2.42 ASSUMED	Azimuth 190,80 190,50 201,30 218,50 206,70 194,00 187,20 196,70 202,10 202,10 157,60 164,00 155,60 164,00 158,00	DEVIAT DL Angle 1,35 0,39 0,47 0,83 1,08 1,13 0,29 0,43 1,13 0,29 0,65 1,23 1,04 0,43 1,09 0,65 1,23 1,04 0,43 1,09 0,65 1,23 1,04 0,43 1,09 0,65 1,23 1,04 0,43 1,09 0,65 1,23 1,04 0,43 1,09 0,65 1,23 1,04 0,43 1,59 0,50 0,38 0,54 1,59 0,50 0,38 1,12 1,05 0,28 1,105 0,28 1,	Depth 2244 2275 2309 2429 2450 2492 2523	RVEYS Deviation 2.27 2.24 2.06 2.05 1.84 1.22 0.99 0.99 0.91	Azimuth 147.00 156.50 158.70 170.70 171.70 171.20 171.20	DL Angle 0.66 1.11 0.84 0.13 0.73 1.62 0.87 0.84 0.01 0.17	Centages: ription: Depth Depth	Deviation	Azimuth	OCITY DC
BACK ROUND STATE OF THE PROPERTY OF THE PROPER	Cont. GAS Cont.	TRIP GAS Azimuth 184.79 189.53 186.87 188.91 180.49 180.29 175.88 184.40 162.92 175.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75 203.90 172.10 163.30	PROM (tt) DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.68 1.29 1.85 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.62 1.44 2.30 0.51 0.55 0.28 0.30	TO (N) Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1638 1720 1751 1782 1813 1844 1875 1906 1935 1997 2028 2091 2120 2152 2183 2213	Deviation 0,89 0,75 0,73 0,84 0,51 0,83 0,84 0,51 1,20 1,00 0,88 0,84 1,12 1,05 1,16 1,19 1,30 1,75 1,76 1,61 1,91 1,38 1,95 1,74 1,99 2,03 2,42 ASSUMED EFF (%)	Azimuth 190.80 190.50 201.30 218.50 190.50 201.30 218.50 196.70 194.00 187.20 196.70 1202.10 1202.10 179.00 155.60 164.00 155.00 164.00 155.00 164.00 155.20 148.50 155.20 148.50 196.70 155.20 148.50 196.70	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.09 0.65 1.23 1.09 0.65 1.23 1.09 0.65 1.23 1.09 0.43 1.09 0.43 1.09 0.65 1.23 1.09 0.65 1.23 1.09 0.65 1.23 1.09 0.65 1.23 1.09 0.65 1.23 1.09 0.65 1.23 1.09 0.88 0.13 1.55 0.26 0.39 1.12 0.86 0.13 1.52	Depth 2244 2275 2306 2337 2367 2399 2429 2460 2492 2523 2523 2523 2523 2523 2523 2523 25	RVEYS Daviation 2.27 2.24 2.06 2.05 1.95 1.22 0.96 0.99 0.99 0.91	AZIMUTH 147.80 156.50 156.50 157.60 163.20 170.10 171.70 171.90 171.20	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87 0.34 0.01 0.17	Depth Depth	Deviation Deviation	Azimuth Azimuth Azimuth Annuarimum Ann	OGIY DC (Wmin)
BACK ROUND Depth 558 662 663 664 695 727 737 737 737 737 737 11034 874 876 997 11034 11129 11129 11129 11221 1221 1221 1221 1221 1221 1221 1221 1221 1221 1221 1221 1233 1314 1346 1377	Deviation 1.03 1.22 1.20 1.25 1.34 1.34 1.33 1.48 1.33 1.48 0.71 0.56 0.50 0.91 1.00 1.00 1.00 1.00 1.00 1.00 1.0	TRIP GAS Azimuth 184.79 189.53 186.87 188.91 180.49 180.29 175.83 184.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75 203.90 173.03 172.10 163.30	FROM (8) (10) DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.38 0.29 0.12 0.88 1.29 1.04 0.65 1.04 0.65 0.65 0.62 0.40 0.53 0.62 1.48 2.30 0.51 0.58 0.28 0.30	TO (N) Depth 1407 1438 1468 1499 1532 1563 1595 1626 1857 1688 1720 1751 1752 1813 1844 1875 1906 1935 1967 1997 2028 2080 2091 2120 2152 2133	Deviation (%) Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 1.00 1.12 1.05 1.18 1.30 1.75 1.70 1.81 1.91 1.88 1.95 1.74 1.99 2.03 2.42 ASSUMED	Azimuth 190,80 190,50 201,30 218,50 206,70 194,00 187,20 196,70 202,10 202,10 157,60 164,00 155,60 164,00 158,00	DEVIAT DL Angle 1,35 0,39 0,47 0,83 1,08 1,13 0,29 0,43 1,13 0,29 0,65 1,23 1,04 0,43 1,09 0,65 1,23 1,04 0,43 1,09 0,65 1,23 1,04 0,43 1,09 0,65 1,23 1,04 0,43 1,09 0,65 1,23 1,04 0,43 1,09 0,65 1,23 1,04 0,43 1,59 0,50 0,38 0,54 1,59 0,50 0,38 1,12 1,05 0,28 1,105 0,28 1,	Depth 2244 2275 2309 2429 2450 2492 2523	RVEYS Deviation 2.27 2.24 2.06 2.05 1.84 1.22 0.99 0.99 0.91	Azimuth 147.00 156.50 158.70 170.70 171.70 171.20 171.20	DL Angle 0.66 1.11 0.84 0.13 0.73 1.62 0.87 0.84 0.01 0.17	Centages: ription: Depth Depth	Deviation	Azimuth	OCITY DC

EVERGREEN OPERATING, INC. DAILY DRILLING REPORT

RIG CONTACT INFORMATION:
OFFICE TRAILER / FAX: 970 942 7543

CONSULTANT HAND CELL: DOGHOUSE:

PUSHER:

303 913 1054 307 258 7315

DATE SPUD DATE 6AM DEPTH 2712 8/28/2004 8/16/2004 24 HR FOOTAGE REPORT NO. 122 12 DRLG CONTRACTOR DAYS SINCE SPUD Elenburg, Rig 12 12 AFE# CONSULTANT 43-007-30718 John C. Lamb

ACTIVITY AT REPORT TIME:

Drilling ahead

Daily cost cum cost secosts

\$ 20,432 \$ 363,775 \$ -

CH	RONOLO	BY OF DAIL	LY OPERATIONS (06:00 - 06:00 HRS)	SLOW		TE DATA:			G WEIGHT INFO	
FROM	T.O	HOURS	Activity:	Depth	SPM	Pressure	Eff BHA Wt		Slackoff:	Hoisting:
(hrs)	(hrs)	(hrs)	Activity.	2707	54	375	43,000	102,000	99,000	103,000
06:00	07:00	1.00	Rotate 2590 - 2606			-	****			
07:00	07:30	0.50	Slide 2606 - 2618							
07:30	13:15	5.75	Rotate 2618 - 2667, torque increasing at 2640'							
13:15	13:30	0.25	Service rig							
13:30	14:15	0.75	Rotate 2667 - 2680, high torque while on bottom	.,,						
14:15	16:00	1.75	Short trip 15 stands, attempt to reduce torque by wiping	out hole, m	inor drag f	irst 4 stands o	out			
16:00	17:15	1.25	Rotate 2680 - 2698, high torque while on bottom							
17:15	23:00	5.75	Trip out of hole slickly with no drag							
23:00	01:15	2.25	LD & PU mud motor and bit, TIH w/BHA							
01:15	02:30	1.25	Change out drilling line							
02:30	04:00	1.50	Trip in hole							
04:00	05:15	1.25	Wash 4 stands to bottom							
05:15	05:45	0.50	Rotate 2698 - 2707							
05:45	06:00	0.25	Slide 2707 - 2722							
	†	1								
									DE	
									nc	CHMED
									DEC	1 0
									בבנ	CEIVED 1 3 2004
									HIN UP OIL	. CAS & MINING
TOTAL	HOURS	24.00								

SUMMARY	DAILY	CUM		
		1		
DESC.	(hrs)			
Drill	10.00	177.25		
Trip	9.00	22.75		
Circulate		0.75		
Rig Repair		22.75		
Rig Service	0.25	4.00		
Dev Survey		1		
NU / ND		8.50		
Cement				
Run Casing				
woc				
OH Logging				
Mix Mud				
MI & RU		6.00		
RatHole				
Mouse Hale				
Fishing				
Other		0.50		
Caring				
Inspect BHA				
Cut drig line	1.25	1.25		
Wash & Ream	1.25	1.25		
Drill Cement		6.25		
Test BOPE		1.50		
woo				
PU/LD BHA	2.25	9.25		
insp circ equip		3.50		
TOTALS	24.00	265.50		

	SUMMARY OF DAILY & CUMULATIVE (5031	DAILY		CUM	AFE
COST CODE	DESCRIPTION OF DAILY COSTS		(\$)		(\$)	(S)
2030.010	Land, Legal, Title, Survey, Arch, Damages, Permits, Signs		A.V		(4)	· · · · · · · · · · · · · · · · · · ·
2030.031	Dirtwork, Road, Location, Pits, Liner	\top				
2030.019	Contract Drilling 9480 / day 392.5 / h cond 5071 26,000 mob sfc 36791	\$	9,480	\$	178,712	
2032.001	Water	\$	351	+	2,970	
2032.013	Drill Bits, Stabilizers, Reamers			\$	24,000	
2031.046	Cementing and Services			\$	5,000	
2030.053	Coring and Analysis			1		
2030.052	Logging			İ		
2030.054	Mud Logging					
2030.037	Rental Equipment	\$	1,501	\$	20,420	
2030.028	Transportation			\$	8,362	
2032.004	Mud and Chemicals	\$	2,066	\$	16,786	
	Directional Services, Mud Motors	\$	6,234	\$	72,274	
	Intermediate casing					
2030.035	Contract Labor			\$	2,920	
2030.022	Engineering / Supervision	\$	800	\$	9,600	
2030.099	Intangible Miscellaneous and Contingencies					
2040.001	Surface Casing			\$	17,790	
2040.004	Production Casing					
1011.000	Float Equipment, Shoes, Centralizers					
1041.000	Wellhead Equipment			\$	4,941	
1073.000	Bottom Hole Pump / Gas Lift / Other					
1104.000	Drivehead, Engine / Motor and Hydraulic Pump / Electric Unit					
2040.052 / 2040.055	Valves and Fittings, Small / Large					
2040.067	Other Surface Equipment					
2040.099	Tangible Miscellaneous and Contingencies					
	TOTAL COSTS	s	20,432	S	363,775	s -

	12	Date:	08/28/04 Well Na	me.	<u> </u>		ILLING		RI						
7,21,1	. 7		11011140					T RECOR	,	· · · · · · · · · · · · · · · · · · ·	·	- ·			
BIT	ENT					DEPTH	DEPTH	FOOTAGE	CUM BIT			RPM	TORQUE	B	T GRADING
NO.	SIZE			SERIAL	JETS	IN	OUT	DRILLED (A)	HOURS (hrs)	ROP (ft/hr)	WOB (#%)	MTR/TBL	(ft -1bs)	In Out Dull Loc	Seals Gge Dull
(F) 1	(m) 12 1/4	MFG Security	XL 18N	754840	(32/32/32) 14 / 14 / 14 / 1	(A) 494	1,799	1,305	102.75	12.7	36 - 43	45 / 60	2100 - 2900		
2	12 1/4	Security	XL43	10408516	18 / 18 / 18	1,799	2,698	899	83.25	10.8	35 - 40	45 / 45-70	1400 - 2200		
3	12 1/4	Smith	F4	MT6085	18 / 18 / 18	2,698	2,712	14	0.75	18.7	35 - 40	45 / 60	1800 - 2000		
						 	ļ	0		#DIV/0!		 	 		
						-		0		#DIV/0!					
		-				<u> </u>		0		#D1V/0!					
	MENTS														
REN	TAL EQUIP				11 1988 418	1	I i	1	EXTERNAL	CASING I	JAIA		TOP	воттом	
ITEM	COSTS	COSTS		SIZE	WEIGHT	GRADE	CONIN	DRIFTID	COLLAPSE	YIELD	CAPACITY	LENGTH	SET AT	SET AT	
	(\$)	(5)				<u> </u>			(psi)	(psi)	(bbls/ft)	(R)	(1)	(ft KB)	
ving Qtrs	\$ 315	\$ 3,840		30*	NA	NA_						40.00	0.00	40.00	
Tank	\$ 45	\$ 530		13 3/8*	54,5	J55	ST&C	12.459	1,130	2,730	0.15450	500.00	2.00	498.00	
lift	\$ 60 \$ 20	\$ 720 \$ 240		—			 					1			
ajohn Trailer	\$ 50	\$ 600													
Cleaner	\$ 375	\$ 4,500	124					В	оттомно			1		 	
	\$ 100	\$ 1,200	- No.							MAXIMUM	MINIMUM	LENGTH			
dntler	\$ 90	\$ 1,080		SCRIPTION OF	PHA		VIDER	BOX	AD SIZE	0.D. (In)	(In)	LENGTH (A)	HOURS RUN	HRS SINCE INSPECTION	<u>-194</u>
mud cfm collars	\$ 196	\$ 375 \$ 4,585	oe	Bit			mith		6 5/8 R	12.250	I	1.25			
collars ck Sub	\$ 250	\$ 2,750	7/8 Lob • 4	****	g Mud Motor		k Max	6 5/8 R	6 5/8 R	8.000	1	29.52			
	1			Float Sub			DI	6 5/8 R	6 5/8 R	8.000	3,000	3.02			
r .]		riffith Shock			idle	6 5/8 R	6 5/8 R	8.000	2.688	11.99			
	 	ļ		Monel Drill Co			DI DI	6 5/8 R 6 5/8R	6 5/8 R 6 5/8 R	8.000 7.750	3.250 3.750	30.58 8.94			
<u> </u>	+	 	Hang	Off Sub & G	-p out		DI	6 5/8 H90	6 5/8 R	8.000	3.750	2.35			
	1		7 -	7 3/4° Drill C	ollars		ig	6 5/8 H90	6 5/8 H90	7,750	2.250	340.02			
r				XO		s	DI	4 1/2 XH	6 5/8 H90	7.750	2.625	2.35			
OTALS	\$ 1,501	\$ 20,420	10-	- 6 1/2 Drill C	ollars	<u> </u>	ig	4 1/2 XH	4 1/2 XH	6.500	2.250	309.53			<u> </u>
AMPLE	S	MUD	FUNNEL	Time in		GEL	DRILLIN	G MUD R	EPORT CAKE		SAND				Section 1
DEPTH	TIME	WT.	VISCOSITY	PV/YP	KCL	STRENGTH	API	CALCILM	THICKNESS	soups	CONTENT	рН	CHLORIDES	ALKALINITY Pf/Mf	LCM
2,640	(hh:mm) 09:00	(PPg) 9.40	(sec/qt) 38	10 / 17	2.00	(16/100 ft2) 7 / 17	(ml/30 min) 16.0	(ppm) 20	(/32 in) 2	(% vol) 7.0	(% vol) 1/2	9.5	(ppm) 13,000	.7/3.9	ib/gal
2,640	16:00	9.30	37	10 / 14	2.00	7/14	16.0	20	2	6.2	1/4	10.0	13,000	1.0 / 4.0	
-1::::															
jida qad		7 - 5			1.200.00	DA	LY MUD	COST & I	NVENTOR	Y	70.00	<u> </u>			
			BARITE	QUICK GEL	CAUSTIC	LIME	SODA ASH	UNIDRILL	SOLKWICK	FAC-R	PHPA	CEDAR	TRUCKING		TOTAL COSTS
	1 7 10 00		{6× }	(sx)	(sx)	(sx)	(sx)	(sx)	(sx)	(sx)	(gal) .	(sx)	VIIII		
RTING IN	VENTORY		120	†											
ENTORY R	ECEIVED														
D LAST 24							-			L		_			
ING INVE	NTORY	1													//////////////////////////////////////
V	OPT			+									<i>,,,,,,,,,,,</i> ,,,,,,,,,,,,,,,,,,,,,,,,,		
	OST														
vious cu															
EVIOUS CU	MULATIVE COST MUD COST							GGER RI							
MULATIVE	MULATIVE COST MUD COST D GAS DATA (In U	Initis)	SHOW INTE			OF PENETRATI	ON		SHOW GAS DA		Formation 1	Tops:			
EVIOUS CU	MULATIVE COST MUD COST		SHOW INTE	RVAL TO (R)	RATE (BEFORE (f)	DE PENETRATI DURING (R)				TA AFTER UNITS	Formation 1	Tops:	possible Pr	ice River 2100'	1
EVIOUS CU MULATIVE MUL BACK	MULATIVE COST MUD COST D GAS DATA (In U	Ints)	FROM	70	BEFORE	DURING	ON APTER	BEFORE	SHOW GAS DA DURING	AFTER	Sample per	centages:	possible Pr	ice River 2100'	1
IVIOUS CU IULATIVE MUC BACK	MULATIVE COST MUD COST D GAS DATA (In U	Ints)	FROM	70	BEFORE	DURING	ON APTER	BEFORE	SHOW GAS DA DURING	AFTER	<u></u>	centages:	possible Pr	ice River 2100'	1
VIOUS CU ULATIVE MUC	MULATIVE COST MUD COST D GAS DATA (In U	Ints)	FROM	70	BEFORE	DURING	ON APTER	BEFORE	SHOW GAS DA DURING	AFTER	Sample per	centages:	possible Pr	ice River 2100'	1
VIOUS CU IULATIVE MUC BACK	MULATIVE COST MUD COST D GAS DATA (In U	Ints)	FROM	70	BEFORE	DURING	ON APTER (R)	BEFORE LINTS	SHOW GAS DA DURING UNITS	AFTER	Sample per Sample Descr	centages:	passible Pr	ice River 2100'	1
MULATIVE MULATIVE MULATIVE	MULATIVE COST MUD COST GAS DATA (in U CONN) GAS	Ants) TRIP GAS	FROM (%)	(R)	BEFORE	DURING	ON APTER (R)	BEFORE LINTS	SHOW GAS DA DURING UNITS	AFIER UNITS	Sample per Sample Descr	centages:	possible Pr	ice River 2100*	1
MULATIVE MULATIVE MULATIVE MULATIVE Ophth 538	MULATIVE COST D GAS DATA (in U CONN) GAS Deviation 1.03	Azimuth	FROM (N) DL Angle 0.19	70 (R) Depth 1407	Deviation 0.69	Azimuth	ON APTER (R) DEVIAT DL Angle 1.35	BEFORE UNITS ION SUI Depth 2244	SHOW GAS DA DURING UNITS RVEYS Deviation 2.27	AFIER UNITS Azimuth 147.80	Sample percisample Descri	centages: ription:			
MULATIVE MULATIVE MULATIVE MULATIVE Ophth 538 566	MULATIVE COST MUD COST O GAS DATA (in U CONN GAS Deviation 1.03 1.22	Azimutt 184.79 189.53	PL Angle 0.19 0.76	To (h) Depth 1407 1438	Deviation 0.69 0.75	Azimuth 190.80 190.50	DEVIAT DL Angle 1,35 0.39	BEFORE UNITS ION SUI Depth 2244 2275	DEVIATION 2.27	AFIER UNITS Azimuth 147.80 156.50	Sample per Sample Describeration of the control of	centages: ription:			
MUE MUE BACK ROUND Pepth 538 566 602	Deviation 1.03 1.22 1.20	Azimuth 184.79 189.53 136.87	PL Angle 0.19 0.76 0.17	Depth 1407 1438 1468	Deviation 0.69 0.75 0.73	Azimuth 190.80 190.50 201.30	DEVIAT DL Angle 1,35 0,39 0.47	Depth 2244 2275 2306	Deviation 2.27 2.06	AFIER UNITS Azimuth 147.80 156.50 158.70	Sample per Sample Describer DL Angle 0.66 1.11 0.64	centages: ription:			
MULATIVE MULATIVE MULATIVE Pepth 538 566 602 633	MULATIVE COST D GAS DATA (In L. CONN.) CONN. GAS Deviation 1.03 1.22 1.20 1.25	Azimuth 184.79 189.53 136.87 138.91	PL Angle 0.19 0.76	Depth 1407 1438 1468 1499	Deviation 0.69 0.75 0.73	Azimuth 190.80 190.50 201.30 218.50	DEVIAT DL Angle 1.35 0.39 0.47 0.83	BEFORE UNITS ION SUI Depth 2244 2275	RVEYS Deviation 2.27 2.24 2.06 2.05	AFIER UNITS Azimuth 147.80 156.50	Sample per Sample Describeration of the control of	centages: ription:			
MUE BACK ROUND Depth 538 666 602 633 664	Deviation 1.03 1.22 1.20	Azimuth 184.79 189.53 136.87	PL Angle 0.19 0.76 0.17 0.21	Depth 1407 1438 1468	Deviation 0.69 0.75 0.73	Azimuth 190.80 190.50 201.30	DEVIAT DL Angle 1,35 0,39 0.47	Depth 2244 2275 2306 2337	Deviation 2.27 2.06	AFIER UNITS Azimuth 147.80 156.50 158.70 157.60	Sample perc	centages: ription:			
MUC BACK ROUND Pepth 538 566 602 633 664 695	Deviation 1.03 1.22 1.25 1.34 1.32 1.32 1.32	Azimuth 184.79 189.53 186.87 138.91 180.49 180.49 180.29 175.88	DL Angle 0.19 0.76 0.17 0.21 0.63 0.26 0.36	Depth 1407 1438 1468 1499 1532 1563	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85	Azimuth 190.80 190.50 201.30 216.50 206.70 194.00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29	BEFORE LINTS ION SUI Depth 2244 2275 2306 2337 2367 2399 2429	RVEYS Deviation 2.27 2.06 2.05 1.48 1.22	Azimuth 147.80 156.50 158.70 157.60 163.20 170.70	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87	centages: ription:			
MULATIVE MUCATIVE MUCATIVE MUCATIVE Peptth 538 5566 602 664 685 727 757	Deviation Deviation 1.22 1.25 1.34 1.32 1.33 1.34	Azimuth 184.79 189.53 136.87 180.49 180.29 175.88 164.40	DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89	Depth 1407 1438 1468 1499 1532 1563 1595 1626	Deviation 0.69 0.75 0.73 0.84 0.81	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 196.70	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43	Depth 2244 2275 2306 2337 2367 2429 2460	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.96	Azimuth 147.80 156.50 157.60 163.20 170.70 170.10	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87	centages: ription:			
MCC Scu MAN MCC MAN MCC MAN MCC MCC MCC MCC MCC MCC MCC MCC MCC MC	Deviation 1.03 1.22 1.26 1.32 1.34 1.33	Azimuth 184.79 189.53 136.87 138.91 180.29 175.88 164.40 162.92	DL Angle 0.19 0.17 0.21 0.26 0.36 0.26 0.36 0.40 0.40	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657	Deviation 0.89 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 196.70 202.10	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.10 1.13 0.29 0.43 1.29	Depth 2244 2275 2306 2337 2367 2399 2429 2460 2492	RVEYS RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.98 0.98	Azimuth 147.80 156.50 158.70 170.70 170.10 171.90	DL Angle Description DL Angle O.86 1.11 O.64 O.13 O.73 1.62 O.87 O.84 O.01	centages: ription:			
WULATIVE MULTIVE MU	Deviation 1.03 1.25 1.34 1.33 1.33 1.44	Azimuth 184.79 189.53 186.87 180.49 180.49 175.88 164.40 182.92 175.88	DL Angle 0.19 0.76 0.17 0.21 0.65 0.26 0.36 0.89 0.12 0.68	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1688	Deviation 0.69 0.75 0.73 0.84 0.85 0.81 1.20 1.00	Azimuth 190.50 201.30 218.50 206.70 194.00 187.20 196.70 202.10	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.13 0.29 0.43 1.29 0.65	BEFORE LNTS ION SUI Depth 2244 2275 2306 2337 2367 2399 2429 2460 2492 2523	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.22 0.96 0.96 0.91	Azimuth 147.8 50 156.50 157.60 170.70 171.70 171.20	Sample person Sample Description	centages: ription:			
MCCADO Depth 5538 566 602 727 757 757 787 844	Deviation Deviat	Azimuth 184.79 189.53 186.87 180.49 180.29 175.88 184.40 162.92 143.19	DL Angle 0.19 0.76 0.17 0.21 0.65 0.26 0.39 0.89 0.12 0.68	Depth 1407 1438 1488 1499 1532 1563 1595 1626 1657 1688 1720	Deviation 0.69 0.75 0.73 0.83 0.81 1.20 1.00 0.88	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 196.70 202.10 202.10	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23	Depth 2244 2275 2306 7 2399 2429 2460 2492 2523 2553	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.44 1.22 0.96 0.96 0.96 1.23	Azimuth 147.80 156.50 155.70 170.70 171.90 171.90 170.60	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.84 0.01 0.01	centages: ription:			
MULATIVE MULATI	Deviation 1.03 1.25 1.34 1.33 1.33 1.44	Azimuth 184.79 189.53 186.87 188.91 180.49 180.29 175.88 184.40 182.92 156.82 156.82 143.19	DL Angle 0.19 0.76 0.17 0.21 0.65 0.26 0.36 0.89 0.12 0.68	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1688	Deviation 0.69 0.75 0.73 0.84 0.85 0.81 1.20 1.00	Azimuth 190.50 201.30 218.50 206.70 194.00 187.20 196.70 202.10	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.13 0.29 0.43 1.29 0.65	BEFORE LNTS ION SUI Depth 2244 2275 2306 2337 2367 2399 2429 2460 2492 2523	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.22 0.96 0.96 0.91	Azimuth 147.8 50 156.50 157.60 170.70 171.70 171.20	Sample person Sample Description	centages: ription:			
MUCUND COUNTY CO	Deviation 1.03 1.22 1.20 1.25 1.34 1.33 1.48 1.48 1.48 1.68	Azimuth 184.79 189.53 186.87 180.49 180.29 175.88 184.40 162.92 143.19	DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.39 0.49 0.12 0.68 1.29 1.88 0.51	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1688 1720 1751	Deviation 0.69 0.75 0.73 0.83 0.81 1.20 1.00 0.88 0.84 0.93 1.12	Azimuth 190.80 190.50 201.30 216.50 206.70 194.00 187.20 196.70 202.10 202.10 179.00 157.60 164.00 149.00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04	BEFORE UNTS LON SUI Depth 2244 2275 2306 2307 2397 2397 2499 2492 2492 2523 2553 2584	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.98 0.98 0.91 1.23 1.10	Azimuth 147.80 156.50 158.70 170.70 171.70 171.90 171.20 170.60 163.70	Sample per Sample Description	centages: ription:			
MUCUS CU ULATIVE MUCUS CU ULA	Deviation 1.03 1.22 1.26 1.32 1.33 1.48 1.43 0.84 0.71 0.86	Azimuth 184.79 189.53 186.87 183.91 180.29 175.88 184.40 182.92 156.82 143.19 137.08 130.59 112.85	DL Angle 0.19 0.76 0.17 0.21 0.85 0.26 0.36 0.36 0.12 0.68 1.29 1.88 0.51	Depth 1407 1438 1468 1592 1563 1595 1626 1657 1751 1772 1813 1844	Deviation 0.69 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.83 0.84 0.93 1.12 1.05	Azimuth 190.80 190.50 201.30 205.70 194.00 187.20 196.70 202.10 196.70 195.70 195.70 157.80 154.00 155.00 155.00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.65 1.23 1.04 0.43 1.04 0.59	Depth 2244 2275 2306 2337 2367 2399 2429 2452 2523 2553 2584 2614	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.22 0.98 0.98 0.99 1.12 1.23 1.10 1.30	Azimuth 147.8 156.50 158.70 157.60 170.70 171.10 171.20 170.60 163.70 157.40	DL Angle 0.66 1.11 0.62 0.87 0.87 0.84 0.17 1.07 0.62 0.60 0.60 0.17 1.07 0.62 0.80 0.8	centages: ription:			
Depth 558 662 633 664 685 727 757 757 767 787 817 8476 9976 996 9979 9971 1034	Deviation 1.03 1.22 1.20 1.32 1.34 1.43 1.43 0.84 0.71 0.86 0.50 0.91	Azimuth 184.79 189.53 186.87 180.49 180.29 175.88 164.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50	DL Angle 0.19 0.76 0.17 0.21 0.36 0.26 0.36 0.26 0.36 0.51 0.68 1.29 1.88 0.51 0.95	Depth 1407 1438 1468 1499 1592 1563 1595 1688 1720 1751 1782 1813 1814 1813	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.93 1.12 1.05 1.12	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 196.70 202.10 202.10 179.00 157.60 164.00 145.00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 0.43 1.06 0.59 0.83	Depth 2244 2275 2306 2337 2367 2399 2429 2452 2523 2553 2584 2614	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.22 0.98 0.98 0.99 1.12 1.23 1.10 1.30	Azimuth 147.8 156.50 158.70 157.60 170.70 171.10 171.20 170.60 163.70 157.40	DL Angle 0.66 1.11 0.73 0.73 0.87 0.84 0.01 0.17 1.07 0.62 0.64	centages: ription:			
Depth 538 ROUND 558 ROUND	Deviation GAS DATA (in the Cost of Cos	Azimuth 184.79 189.53 186.87 188.91 180.49 180.29 175.88 164.40 162.92 143.19 137.08 130.59 112.85 107.94 109.50 120.10	DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.39 0.49 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65	Depth 1407 1438 1468 1499 1532 1563 1720 1751 1782 1813 1844 1847 1878 1878 1878 1878 1878 1878	Deviation 0.69 0.75 0.73 0.83 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.18 1.30	Azimuth 190.80 190.50 201.30 216.50 206.70 194.00 187.20 196.70 202.10 202.10 179.00 149.00 149.00 149.00 149.00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.43 1.29 0.65 1.23 1.04 0.43 1.06 0.59 0.83	Depth 2244 2275 2306 2337 2367 2399 2429 2452 2523 2553 2584 2614	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.22 0.98 0.98 0.99 1.12 1.23 1.10 1.30	Azimuth 147.8 156.50 158.70 157.60 170.70 171.10 171.20 170.60 163.70 157.40	DL Angle 0.66 1.11 0.73 0.73 0.87 0.84 0.01 0.17 1.07 0.62 0.64	centages: ription:			
MCC BACK ROUND Depth S56 602 695 727 737 817 827	Deviation 1.03 1.22 1.20 1.25 1.34 1.33 1.48 1.33 1.48 0.71 0.71 0.50 0.91 1.00 1.00	Azimuth 184.79 189.53 186.87 183.91 180.29 175.88 164.40 162.92 156.82 143.19 130.59 112.85 107.94 109.50 120.10	DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.65	Depth 1407 1438 1468 1498 1532 1563 1595 1626 1657 1688 1720 1751 1782 1813 1844 1875 1935	Deviation 0.69 0.73 0.84 0.51 0.65 0.65 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.15 1.16 1.30 1.75	Azimuth 190.80 190.50 201.30 218.50 194.00 157.80 154.00 155.00 146.50 155.00 156.00 156.00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 0.43 1.04 0.59 0.83 0.54	Depth 2244 2275 2306 2337 2367 2399 2429 2452 2523 2553 2584 2614	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.22 0.98 0.98 0.99 1.12 1.23 1.10 1.30	Azimuth 147.8 156.50 158.70 157.60 170.70 171.10 171.20 170.60 163.70 157.40	DL Angle 0.66 1.11 0.73 0.73 0.87 0.84 0.01 0.17 1.07 0.62 0.64	centages: ription:			
Depth 538 ROUND	Deviation GAS DATA (in the Cost of Cos	Azimuth 184.79 189.53 186.87 188.91 180.49 180.29 175.88 164.40 162.92 143.19 137.08 130.59 112.85 107.94 109.50 120.10	DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.39 0.49 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65	Depth 1407 1438 1468 1499 1532 1563 1720 1751 1782 1813 1844 1847 1878 1878 1878 1878 1878 1878	Deviation 0.69 0.75 0.73 0.83 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.18 1.30	Azimuth 190.80 190.50 201.30 216.50 206.70 194.00 187.20 196.70 202.10 202.10 179.00 149.00 149.00 149.00 149.00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.43 1.29 0.65 1.23 1.04 0.43 1.06 0.59 0.83	Depth 2244 2275 2306 2337 2367 2399 2429 2452 2523 2553 2584 2614	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.22 0.98 0.98 0.99 1.12 1.23 1.10 1.30	Azimuth 147.8 156.50 158.70 157.60 170.70 171.10 171.20 170.60 163.70 157.40	DL Angle 0.66 1.11 0.73 0.73 0.87 0.84 0.01 0.17 1.07 0.62 0.64	centages: ription:			
MCC BACK ROUND MCC BA	Deviation 1.03 1.22 1.20 1.25 1.34 1.33 1.48 1.33 1.49 0.84 0.71 0.99 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Azimuth 184.79 189.53 186.87 188.91 180.49 180.29 175.88 184.40 182.92 156.82 143.19 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30	PROM (%) DL Angle 0.19 0.76 0.17 0.21 0.65 0.26 0.36 0.40 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.62	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1688 1720 1751 1752 1813 1844 1875 1906 1935	Deviation 0.69 0.73 0.84 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.18 1.30 1.75 1.70 1.61	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 202.10 202.10 179.00 157.60 146.00 146.50 155.00 161.00 155.00 161.00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 0.43 1.06 0.59 0.83 0.54 1.59 0.50 0.39	Depth 2244 2275 2306 2337 2367 2399 2429 2452 2523 2553 2584 2614	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.22 0.98 0.98 0.99 1.12 1.23 1.10 1.30	Azimuth 147.8 156.50 158.70 157.60 170.70 171.10 171.20 170.60 163.70 157.40	DL Angle 0.66 1.11 0.73 0.73 0.87 0.84 0.01 0.17 1.07 0.62 0.64	centages: ription:			
Depth 538 ROUND 558 ROUND	Deviation 1.03 1.22 1.20 1.25 1.34 1.48 1.43 1.48 1.43 1.40 1.41 1.40 1.40	Azimuth 184.79 189.53 186.87 180.49 180.29 175.88 164.40 162.92 156.82 143.19 130.59 112.85 130.59 112.85 130.59 112.85 137.98 130.59 112.85 137.98 139.59 112.85 137.98 139.59 112.85 137.98 139.59 141.85 141.95 141.95 141.95 141.95 141.95 141.95 141.95 141.95 141.95 141.95 141.95 141.95	DL Angle 0.19 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.42 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.33	Depth 1407 1438 1468 1499 1532 1563 1595 1688 1770 1751 1782 1813 1844 1875 1906 1935 1967 1997 2028 2060	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.93 1.12 1.05 1.18 1.30 1.75 1.76 1.76 1.81	Azimuth 190.80 190.50 201.30 216.50 206.70 194.00 187.20 196.70 202.10 202.10 179.00 164.00 145.50 155.60 161.00 155.40 161.00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 0.43 1.06 0.59 0.83 0.54 1.59 0.83	Depth 2244 2275 2306 2337 2367 2399 2429 2452 2523 2553 2584 2614	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.22 0.98 0.98 0.99 1.12 1.23 1.10 1.30	Azimuth 147.8 156.50 158.70 157.60 170.70 171.10 171.20 170.60 163.70 157.40	DL Angle 0.66 1.11 0.73 0.73 0.87 0.84 0.01 0.17 1.07 0.62 0.64	centages: ription:			
Depth Scott Round	Deviation GAS DATA (in La Control of Control	Azimuth 184.79 189.53 186.87 180.49 180.29 170.88 164.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75	DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.53 0.62	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1688 1720 1751 1782 1813 1844 1875 1906 1935 1997 2028 2060 2091	Deviation 0.69 0.75 0.73 0.83 0.84 0.51 0.085 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.18 1.30 1.75 1.61 1.91 1.88	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 157.20 196.70 202.10 179.00 155.00 146.50 155.40 164.00 155.40 164.00 155.40 164.00 155.40 164.00 155.40 164.00 155.40 164.00 155.40 164.00 155.40 164.00 155.40 164.00 155.40 164.00 155.40 164.00 155.40 164.00 155.40 164.20 155.20	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.23 1.04 0.43 1.06 0.59 0.83 1.03 1.05 1.03 1.06 0.59 0.83 0.54 1.59 0.83 0.54 1.59 0.83 0.54 1.59 0.50 0.39	Depth 2244 2275 2306 2337 2367 2399 2429 2452 2523 2553 2584 2614	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.22 0.98 0.98 0.99 1.12 1.23 1.10 1.30	Azimuth 147.8 156.50 158.70 157.60 170.70 171.10 171.20 170.60 163.70 157.40	DL Angle 0.66 1.11 0.73 0.73 0.87 0.84 0.01 0.17 1.07 0.62 0.64	centages: ription:			
MCC BACK ROUND MCC BA	Deviation 1.03 1.22 1.20 1.25 1.34 1.34 1.33 1.40 1.33 1.40 1.34 1.30 1.40 1.40 1.40 1.40 1.40 1.40 1.40 1.4	Azimuth 184.79 189.53 186.87 188.91 180.29 175.88 184.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75	PROM (%) DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.49 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.62 1.48 2.30 0.51	Depth 1407 1438 1468 1468 1593 1593 1626 1657 1688 1720 1751 1782 1813 1844 1875 1906 1935 1967 1997 2028 2060 2091 2120	Deviation 0.69 0.73 0.84 0.81 1.20 1.00 1.00 1.12 1.05 1.18 1.30 1.75 1.76 1.91 1.85 1.95 1.74	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 157.80 164.00 158.00 156.00 161.00 155.40 164.20 154.10 154.50 154.50 164.20 154.50 164.20 144.50 164.20 1	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 0.43 1.09 0.59 0.83 0.54 1.59 0.50 0.39 1.12 1.05 0.26 1.03	Depth 2244 2275 2306 2337 2367 2399 2429 2452 2523 2553 2584 2614	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.22 0.98 0.98 0.99 1.12 1.23 1.10 1.30	Azimuth 147.8 156.50 158.70 157.60 170.70 171.10 171.20 170.60 163.70 157.40	DL Angle 0.66 1.11 0.73 0.73 0.87 0.84 0.01 0.17 1.07 0.62 0.64	centages: ription:			
Depth 526 AG 2 AG 2 AG 2 AG 2 AG 2 AG 2 AG 2 AG	Daviation	Azimuth 184.79 189.53 186.87 188.91 180.49 189.29 175.88 164.40 182.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75 203.90	DL Angle 0.19 0.76 0.17 0.21 0.88 0.26 0.36 0.40 0.51 0.95 0.62 0.40 0.53 0.33 0.62 1.48 2.30 0.51	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1688 1720 1751 1782 1813 1844 1875 1906 1935 1967 1997 2028 2060 2091 2120 2152	Deviation 0.89 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.18 1.30 1.75 1.70 1.61 1.91 1.88 1.95 1.74	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 196.70 202.10 202.10 179.00 146.50 149.00 146.50 155.60 161.00 155.40 164.20 154.10 155.20	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 0.43 1.06 0.43 1.05 0.33 0.54 1.59 0.33 0.54 1.59 0.33 0.54 1.59 0.33 0.54 0.50 0.39 0.30 0.54 0.50 0.39 0.50 0.39 0.50 0.39 0.50 0.39 0.50 0.39 0.50	Depth 2244 2275 2306 2337 2367 2399 2429 2452 2523 2553 2584 2614	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.22 0.98 0.98 0.99 1.12 1.23 1.10 1.30	Azimuth 147.8 156.50 158.70 157.60 170.70 171.10 171.20 170.60 163.70 157.40	DL Angle 0.66 1.11 0.73 0.73 0.87 0.84 0.01 0.17 1.07 0.62 0.64	centages: ription:			
MCC S CU ULATIVE SACK ROUND S CU ULATIVE SACK ROUND S CO CO CO CO CO CO CO CO CO CO CO CO CO	Deviation 1.03 1.22 1.20 1.25 1.34 1.34 1.33 1.40 1.33 1.40 1.34 1.30 1.40 1.40 1.40 1.40 1.40 1.40 1.40 1.4	Azimuth 184.79 189.53 186.87 188.91 180.29 175.88 184.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75	PROM (%) DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.49 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.62 1.48 2.30 0.51	Depth 1407 1438 1468 1468 1593 1593 1626 1657 1688 1720 1751 1782 1813 1844 1875 1906 1935 1967 1997 2028 2060 2091 2120	Deviation 0.69 0.73 0.84 0.81 1.20 1.00 1.00 1.12 1.05 1.18 1.30 1.75 1.76 1.91 1.85 1.95 1.74	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 157.80 164.00 158.00 156.00 161.00 155.40 164.20 154.10 154.50 154.50 164.20 154.50 164.20 144.50 164.20 1	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 0.43 1.09 0.59 0.83 0.54 1.59 0.50 0.39 1.12 1.05 0.26 1.03	Depth 2244 2275 2306 2337 2367 2399 2429 2452 2523 2553 2584 2614	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.22 0.98 0.98 0.99 1.12 1.23 1.10 1.30	Azimuth 147.8 156.50 158.70 157.60 170.70 171.10 171.20 170.60 163.70 157.40	DL Angle 0.66 1.11 0.73 0.73 0.87 0.84 0.01 0.17 1.07 0.62 0.64	centages: ription:			
MCC S CU ULATIVE SACK ROUND S CU ULATIVE SACK ROUND S CO CO CO CO CO CO CO CO CO CO CO CO CO	Deviation GAS DATA (in L. CONTROL CONT	Azimuth 184.79 189.53 186.87 188.91 180.49 180.29 175.88 184.40 182.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75 203.90 173.03 172.10	DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.62 1.48 2.30 0.51 0.58	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1688 1720 1751 1782 1813 1844 1875 1906 1935 1967 1967 1967 1967 1967 1967 1967 1967	Deviation 0.69 0.75 0.73 0.83 0.84 0.51 0.085 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.18 1.30 1.75 1.76 1.91 1.88 1.95 1.74	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 157.20 196.70 202.10 190.50 156.00 146.50 155.40 1	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.23 1.04 0.43 1.06 0.59 0.83 1.06 0.59 1.12 1.06 0.59 0.83 0.54 1.59 0.83 0.54 1.59 0.83 0.54 0.50 0.39 1.10 0.50 0.39 0.10 0.50 0.39 0.10 0.50 0.30 0.30 0.31	Depth 2244 2275 2306 2337 2367 2399 2429 2452 2523 2553 2584 2614	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.22 0.98 0.98 0.99 1.12 1.23 1.10 1.30	Azimuth 147.8 156.50 158.70 157.60 170.70 171.10 171.20 170.60 163.70 157.40	DL Angle 0.66 1.11 0.73 0.73 0.87 0.84 0.01 0.17 1.07 0.62 0.64	centages: ription:			
MCC S CU ULATIVE SACK ROUND S CU ULATIVE SACK ROUND S CO CO CO CO CO CO CO CO CO CO CO CO CO	Deviation GAS DATA (in L. CONTROL CONT	Azimuth 184.79 189.53 186.87 188.91 180.49 180.29 175.88 184.40 182.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75 203.90 173.03 172.10	DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.62 1.48 2.30 0.51 0.58	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1688 1720 1751 1782 1813 1844 1875 1906 1935 1967 1967 1967 1967 1967 1967 1967 1967	Deviation 0.69 0.75 0.73 0.83 0.84 0.51 0.085 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.18 1.30 1.75 1.76 1.91 1.88 1.95 1.74	Azimuth 190.80 190.50 201.30 218.50 208.70 194.00 187.20 196.70 202.10 202.10 157.60 146.50 155.00 146.50 156.00 156.00 155.40 155.50 164.20 154.10 155.50 145.10 155.50	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 0.43 1.06 0.65 1.23 1.06 0.30 0.83 0.54 1.59 0.50 0.39 1.12 1.05 0.26 1.03 0.86 0.13	BEFORE LINTS LION SUI Depth 2244 2275 2306 2337 2367 2399 2429 2480 2492 2523 2553 2553 2584 2614 2644	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.45 1.22 0.98 0.99 1.10 1.30 1.60	Azimuth 147.8 156.50 158.70 157.60 170.70 171.10 171.20 170.60 163.70 157.40	DL Angle 0.66 1.11 0.73 0.73 0.87 0.84 0.01 0.17 1.07 0.62 0.64	centages: ription:			
MCC BACK ROUND 558 66 60 23 664 685 727 727 737 737 844 876 9976 991191 1034 1036 1125 1125 1125 1125 1125 1125 1125 112	Deviation GAS DATA (in L. CONTROL CONT	Azimuth 184.79 189.53 186.87 188.91 180.49 180.29 175.88 184.40 182.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75 203.90 173.03 172.10	PROM (%) DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.62 1.48 2.30 0.51 0.58 0.28 0.30	Depth 1407 1438 1468 1499 1532 1563 1595 1628 1657 1688 1720 1751 1782 1813 1844 1875 1906 1935 1967 2028 2060 2091 2120 2152 2153 2213	Deviation 0.69 0.75 0.73 0.83 0.84 0.51 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.18 1.30 1.75 1.76 1.79 1.81 1.91 1.85 1.91 1.85 1.92 1.93 2.42	Azimuth 190.80 190.50 201.30 218.50 208.70 194.00 187.20 196.70 202.10 202.10 157.60 146.50 155.00 146.50 156.00 156.00 155.40 155.50 164.20 154.10 155.50 145.10 155.50	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.23 1.04 0.43 1.29 0.43 1.29 0.43 1.20 0.40 1.23 1.04 0.40 0.59 0.83 0.54 1.59 0.63 0.75 0.75 0.75 0.75 0.75 0.75 0.75 0.75	Depth Dept	RVEYS Deviation 2.27 2.24 2.06 1.95 1.48 1.22 0.98 0.98 0.98 1.23 1.10 1.30 1.80	Azimuth 147.80 156.50 158.70 157.60 163.20 170.70 171.90 171.20 170.60 163.70	DL Angle 0.66 1.11 0.73 0.73 0.87 0.84 0.01 0.17 1.07 0.62 0.64	Depth			DLAngle
Depth 536 602 603 664 695 727 787 817 817 819 997 11034 61066 11056 11159 11251 11252 11253 11314 11346 11377	Daviation	Azimuth 184.79 189.53 186.57 188.91 180.49 180.29 175.88 164.40 162.92 156.82 143.19 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75 203.90 173.03	PROM (19) DL Angle 0.76 0.17 0.21 0.68 0.26 0.36 0.40 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.62 1.48 0.51 0.55 0.62 0.40 0.53 0.62 1.48 0.51 0.55 0.62	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1688 1720 1751 1752 1813 1844 1875 1906 1935 1967 1997 2028 2060 2091 2120 2152 2153 2213	Deviation 0.69 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 1.00 1.12 1.05 1.18 1.13 1.75 1.70 1.70 1.81 1.91 1.85 1.74 1.99 2.03 2.42	Azimuth 190.80 190.50 201.30 201.30 218.50 206.70 194.00 157.80 164.00 155.40 1	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 0.43 1.09 0.83 1.06 1.23 1.06 0.43 1.05 0.83 1.04 0.43 1.05 0.83 0.54 1.59 0.50 0.39 0.50 0.39 0.50 0.30 0.54 0.15 0.26 0.13 1.52	BEFORE LINTS LON SUI Depth 2244 2275 2306 2337 2367 2399 2429 2480 2492 2523 2553 2553 2564 2614 2644	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.45 1.22 0.98 0.99 1.10 1.30 1.60 NG DATA	Azimuth 147.80 156.50 158.70 157.60 170.70 171.90 171.70 171.90 163.70 157.40 165.40	Sample person	Depth Depth	Deviation	Azimuth	DL Angle OUTY DC
MULATIVE MULE BACK ROUND Depth 538 566 602 633	Deviation GAS DATA (in L. CONTROL CONT	Azimuth 184.79 189.53 186.87 188.91 180.49 180.29 175.88 184.40 182.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75 203.90 173.03 172.10	PROM (%) DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.62 1.48 2.30 0.51 0.58 0.28 0.30	Depth 1407 1438 1468 1499 1532 1563 1595 1628 1657 1688 1720 1751 1782 1813 1844 1875 1906 1935 1967 2028 2060 2091 2120 2152 2153 2213	Deviation 0.69 0.75 0.73 0.83 0.84 0.51 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.18 1.30 1.75 1.76 1.79 1.81 1.91 1.85 1.91 1.85 1.92 1.93 2.42	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 196.70 202.10 202.10 179.00 155.00 146.50 155.00 155.00 146.50 155.00 146.50 155.00 146.50 155.00 146.50 155.00 146.50 155.00 145.00 146.50 155.00 145.00 145.00 155.00 145.00 145.00 145.00 155.00 145.00 145.00 145.00 145.00 145.00 145.00 145.00 145.00 145.00 145.10 1	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.23 1.04 0.43 1.29 0.43 1.29 0.43 1.20 0.40 1.23 1.04 0.40 0.59 0.83 0.54 1.59 0.63 0.75 0.75 0.75 0.75 0.75 0.75 0.75 0.75	Depth Dept	RVEYS Deviation 2.27 2.24 2.06 1.95 1.48 1.22 0.98 0.98 0.98 1.23 1.10 1.30 1.80	Azimuth 147.80 156.50 158.50 159.50 163.20 170.70 171.90 171.90 171.90 157.40	DL Angle 0.86 1.11 0.84 0.13 0.73 1.62 0.87 0.94 0.01 0.17 1.07 0.62 0.30 1.20	Depth Depth	Deviation	Azimuth	DLAngle
Depth Scale Round	Deviation GAS DATA (In L. CORE) GAS DATA (In L. CORE) GAS DATA (In L. CORE) GAS DATA (In L. CORE) GAS DATA (In L. CORE) GAS DATA (In L. CORE) GAS DATA (In L. CORE) DATA (IN L. CORE) DATA (IN L	Azimuth 184.79 189.53 186.87 180.49 180.29 175.88 164.40 182.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75 203.90 172.10 163.30	PROM (%) DL Angle 0.19 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.62 1.48 2.30 0.51 0.55 0.62 0.40 0.53 0.33 0.62 1.48 0.55 0.55 0.62 0.40 0.55 0.62 0.40 0.53 0.33 0.62 0.53 0.33 0.62 0.53 0.33 0.62 0.54 0.55 0.55 0.55 0.55 0.55 0.55 0.55	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1688 1720 1751 1782 1813 1644 1875 1996 1935 1997 2028 2091 2120 2152 2183 2213	Deviation 0.69 0.75 0.73 0.83 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.13 1.30 1.75 1.161 1.91 1.85 1.95 1.74 1.91 1.85 1.95 1.74 1.99 2.03 2.42 ASSLMED EFF (%)	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 196.70 202.10 179.00 155.00 146.50 155.20 146.50 155.20 146.50 155.20 146.50 155.20 145.10 155.20 145.10 155.20 145.10 155.20 145.10 155.20 146.50 145.10 155.20 146.50 145.10 155.20 146.50 145.10 145.10 155.20 146.50 145.10 155.20 146.50 145.10 155.20 146.50 145.10 155.20 146.50 145.10 145.10 155.20 146.50 145.10 145.10 155.20 146.50 145.10 1	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.02 0.65 1.23 1.04 0.43 1.06 0.59 0.83 0.54 1.59 0.83 0.84 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85	Depth 2244 2275 2306 2337 2367 2399 2429 2460 2523 2553 2584 2614 2644	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.92 1.10 1.30 1.60 1.80 NG DATA	Azimuth 147.80 156.50 158.70 170.10 171.70 171.90 171.70 165.40 165.40 165.40 165.40 165.40	DL Angle 0.66 1.11 0.66 1.11 0.67 0.62 0.87 0.84 0.01 0.17 1.07 0.62 0.80 1.20 0.80 0.8	Depth Depth Depth	Deviation Deviation	Azimuth Azimuth ANNLAR VE. DC (Vmin)	DL Angle DL Angle Outy CC ((Vmin)

WELL NAME		
Jensen 1-18 43-0	07-30	2718
LOCATION DATA		
NATION Sec 16 T-12S,	R-10E	
FOOTAGES	GL	кв
SEE FIL SEE FIVE	7569	7580

E. AGREEN OPERATING, INC. DAILY DRILLING REPORT

RIG CONTACT IN	FORMATION:
OFFICE TRAILER / FAX:	970 942 7543
CONSULTANT HAND CELL:	303 913 1054
DOGHOUSE:	307 258 7315
PUSHER:	

8/29/2004 8/16/2004	6AM DEPTH 2977
REPORT NO.	24 HR FOOTAGE
13	265
DRLG CONTRACTOR	DAYS SINCE SPUD
Elenburg, Rig 12	13
CONSULTANT	AFE# API#
John C. Lamb	43-007-30718

ACTIVITY AT REPORT TIME:	DAILY COST		CUM COST		AFE COSTS	
	s	20,358	s	385,575	\$	
Drilling ahead						

FROM (hrs)	то		Y OPERATIONS (06:00 - 06:00 HRS)		, 0 , 0	ATE DATA:	1 22 24 25			RMATION:
1.76		HOURS		Depth	SPM	Pressure	Eff BHA Wt		Slackoff:	Hoisting:
	(hrs)	(hrs)	Activity:	2937	54	325	43,000	107,000	104,000	108,000
06:00	07:00	1.00	Slide 2712 - 2722							
07:00	10:45	3.75	Rotate 2722 - 2770							
10:45	12:15	1.50	Slide 2770 - 2784							
12:15	12:30	0.25	Service rig							
12:30	13:30	1.00	Rotate 2784 - 2804							
13:30	16:15	2.75	Slide 2804 - 2821							
15:15	19:30	3.25	Rotate 2821 - 2859							
19:30	21:45	2.25	Slide 2859 - 2876							
21:45	01:00	3.25	Rotate 2876 - 2917							
01:00	01:45	0.75	Slide 2917 - 2926							
01:45	06:00	4.25	Rotate 2926 - 2977	 						
						10-				
									RECE	IVED —
				 					DEC 1	3 2004
								DIV.	OF OIL, GA	S & MINING
TOTAL H		24.00					,			

SUMMARY	DAILY	CUM
DESC.	(hrs)	(hrs)
Drill	23.75	201.00
Trip	25.10	22.75
Circulate		0.75
Rig Repair		22.75
Rig Service	0.25	4.25
Dev Survey		
NU/ND		8.50
Cement		
Run Casing		
woc		_
OH Logging		
Mix Mud		
MI & RU		6.00
RatHole		
Mouse Hole		
Fishing		
Other		0.50
Coring		L
Inspect BHA		
Cut drig line		1.25
Wash & Ream		1.25
Drill Cement		6.25
TestBOPE		1.50
woo		
PU/LD BHA		9.25
inspicire equip		3.50
TOTALS	24.00	289.50

			DAILY		CUM	AFE
COST CODE	DESCRIPTION OF DAILY COSTS		(\$)		(\$)	(\$)
2030.010	Land, Legal, Title, Survey, Arch, Damages, Permits, Signs					
2030.031	Dirtwork, Road, Location, Pits, Liner			<u> </u>		
2030.019	Contract Drilling 9480 / day 392.5 / h cond 5071 26,000 mob sfc 36791	\$	9,480	\$	188,192	
2032.001	Water			\$	2,970	
2032.013	Drill Bits, Stabilizers, Reamers			\$	24,000	
2031.046	Cementing and Services			\$	5,000	
2030.053	Coring and Analysis					
2030.052	Logging					
2030.054	Mud Logging					
2030.037	Rental Equipment	\$	1,501	\$	22,921	
2030.028	Transportation			\$	8,362	
2032.004	Mud and Chemicals	\$	1,843	\$	18,629	
	Directional Services, Mud Motors	\$	6,734	\$	79,450	
	Intermediate casing			<u> </u>	-rain	
2030.035	Contract Labor			\$	2,920	
2030.022	Engineering / Supervision	\$	800	\$	10,400	
2030.099	Intangible Miscellaneous and Contingencies					
2040.001	Surface Casing			\$	17,790	
2040.004	Production Casing					
1011.000	Float Equipment, Shoes, Centralizers					
1041.000	Wellhead Equipment			\$	4,941	
1073.000	Bottom Hole Pump / Gas Lift / Other					
1104.000	Drivehead, Engine / Motor and Hydraulic Pump / Electric Unit					
2040.052 / 2040.055	Valves and Fittings, Small / Large					
2040.067	Other Surface Equipment					
2040.099	Tangible Miscellaneous and Contingencies					
	TOTAL COSTS	5	20,358	s	385,575	•

	13	Date:	08/29/04 Well Na	me'			ILLING		RI						Page 2
			44911149			36		T RECOR	D						
BIT	THE					DEPTH	DEPTH	FOOTAGE	CUM BIT				ERT .		HT GRADING
NO.	SIZE			SERIAL	JETS (22(22(32)	3N (6)	OUT	DRILLED	HOURS (hrs)	ROP (f/hr)	WOB	RPM MTR/TBL	(ft-lbs)	In Out Dull Loc	Seels Gge Dull
(#)	(In) 12 1/4	MFG Security	XL 18N	754840	(32/32/32) 14 / 14 / 14 / 1	(A) 6 494	1,799	1,305	102.75	12.7	36 - 43	45 / 60	2100 - 2900	6 7 WT ALI	
2	12 1/4	Security	XL43	10408516	18 / 18 / 18	1,799	2,698	899	83.25	10.8	35 - 40	45 / 45-70	1400 - 2200		
3	12 1/4	Smith	F4	MT6085	18 / 18 / 18	2,698	2,977	279 0	24.50	11.4 #DIV/0!	35 - 40	45 / 60	1300 - 2300		
	 			 		h		0		#DIV/0!					
	 							0		#DIV/0!					
						l	<u> </u>	0		#DIV/0!			<u></u>		
	MENTS									CASING	3373				
RENTAL	TAL EQUIP	MENT			145	1	garantan. Kacamatan	T	EXTERNAL	INTERNAL	DATA	Г	тор	BOTTOM	
ITEM	COSTS	COSTS		SIZE	WEIGHT	GRADE	CONN	DRIFT ID	COLLAPSE	YIELD	CAPACITY	LENGTH	SET AT	SET AT	t. = 15.
	(5)	(\$)			15			Pagis	(psi)	(psi)	(6Ms/ft)	(ft) ·	(ft)	(ft KB)	
iving Qtrs	\$ 315	\$ 4,155		30"	NA .	NA	0710	40.450	1 120	2.720	0.15450	40.00 500.00	0.00 2.00	40.00 498.00	
: Tank :lift	\$ 45 \$ 60	\$ 575 \$ 780		13 3/8*	54.5	J55	ST&C_	12.459	1,130	2,730	0.13430	300.00	2.00	400.00	
ajohn	\$ 20	\$ 260									Ĭ				L
Trader	\$ 50	\$ 650							оттомно	I E ACCE	MOLV				
Cleaner	\$ 375 \$ 100	\$ 5,875 \$ 1,300	-							MAXIMUM	MINIMUM				
driller	\$ 90	\$ 1,170	Bara -					THRE	AD SIZE	0.D.	I.D.	LENGTH		HRS SINCE	
nud cinr		\$ 375	DE	SCRIPTION OF	BHA	PRO		вох	PIN	(in)	(in)	(ft)	HOURS RUN	INSPECTION	
collars	\$ 196	\$ 4,781	7(91-1-45	Bit	a Maria		nith L May	6 5/8 R	6 5/8 R 6 5/8 R	12.250 8.000		1.25 24.13			
ck Sub	\$ 250	\$ 3,000	1/0 L008 4 3	Float Sub	g Mud Motor		k Max DI	6 5/8 R	6 5/8 R	8.000	3.000	3.02			
			G	riffith Shock	Sub	Sp	idle	6 5/8 R	6 5/8 R	8.000	2.688	9.43			-
	ļ			Conel Drill Co			DI DI	6 5/8 R	6 5/8 R	8.000	3.250	30.58 8.94			
·	+		Hang	Off Sub & G	ap Sub		DI DI	6 5/8R 6 5/8 H90	65/8 R 65/8 R	7.750 8.000	3.750 3.250	2.35			
			7 -	7 3/4° Drill C	ollars		ig	6 5/8 H90	6 5/8 H90	7.750	2.250	340.02			
				хо			DI	4 1/2 XH	6 5/8 H90	7.750	2.625	2.35			
OTALS	\$ 1,501	\$ 22,921	10 -	6 1/2 Drill C	ollars	<u> </u>	ig	4 1/2 XH	4 1/2 XH	6,500	2.250	309.53			<u></u>
	Prince (1 22		G MUD R					1931 <u>- 1</u>	1.01.000	- 24.132 2 <u>5.</u>
AMPLE DEPTH	TIME	MUD WT,	FUNNEL VISCOSITY	PV/YP	КСЬ	GEL STRENGTH	FILTRATE API	CALCIUM	CAKE THICKNESS	50LIDS	SAND	рΗ	CHLORIDES	ALKALINITY	LCM
(ft) .	(hh:mm)	(PPG)	(sec/qt)		(%)	(Ib/100 #2)	(ml/30 min)	(ppm)	(/32 ln)	(% vol)	(% vol)		(ppm) 13,000	Pf/Mf 1,1/4.4	lb/gal
2,750 2,830	09:00 17:00	9.40	38 40	7 / 20	2.00	6 / 14 5 / 14	17.0 14.5	20	2 2	7.0 6.5	1/4	10.0	13,000	1.1/4.4	
2,830 2,975	05:45	9.30	40	10712	2.00	37 14	15.0			<u> </u>		10.0	,.,.		
124 (17)			.04	7.00		DA	ILY MUD	COST & I	NVENTOR	Y	a angara g	<u> </u>			
11,44	. Barriela d		BARITE	QUICK GEL	CAUSTIC	LIME	SODA ASH	UNIDRILL	SOLKWICK	PAC-R	PHPA	CEDAR	TRUCKING		TOTAL COSTS
			(sx)	(sx)	(#X)	(#X)	(sx)	(sx)	(sx)	(sx.)	(g≠)	(sx)	(\$)	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
T COST				ļ											
ARTING IM. ÆNTORY R			120												
ED LAST 24															
DING INVE				 	 	-						-			
EVIOUS CU	MULATIVE COST	-													
MULATIVE	MUD COST										l				l
- 3500			10000	1.467.088				GGER RI	EPORT			10,700			
BACK							ON			A	Formation 1	Tops:			
	GAS DATA (In L	hits) TRIP	SHOW INTE	TO TO	RATE (BEFORE	DURING	APTER	BEFORE	DURING	AFTER					
ROUND							APTER (R)			AFTER UNITS			possible Pr	ice River 2100	•
ROUND	CONN	TRIP	FROM	70	BEFORE	DURING	10,000,000,000	BEFORE	DURING		Sample per	centages:	possible Pr	ice River 2100	•
ROUND	CONN	TRIP	FROM	70	BEFORE	DURING	10,000,000,000	BEFORE	DURING			centages:	possible Pr	ice River 2100	•
ROUND	CONN	TRIP	FROM	70	BEFORE	DURING	10,000,000,000	BEFORE	DURING		Sample per	centages:	possible Pr	ice River 2100	
ROUND	CONN	TRIP	FROM	70	BEFORE	DURING	(%)	BEFORE	DURING UNITS		Sample per	centages:	possible Pr	ice River 2100	•
) epth	CONN GAS	TRIP GAS	FROM (ft)	TO (ft)	BEFORE (ft) Deviation	DURING (R)	(t) DEVIAT	BEFORE LIMITS ION SUF	DURING UNITS RVEYS Deviation	LNITS	Sample per Sample Desc	centages:	possible Pr	ice River 2100	DL Angle
Depth 538	CONN GAS Deviation	Azimuth	FROM (R) DL Angle 0.19	70 (ft) Depth 1407	SEFORE (ft) Deviation 0.69	Azimuth 190.80	DEVIAT	ION SUF	DURING LINES RVEYS Deviation 2.27	Azimuth 147.80	Sample per Sample Desc DL Angle 0.66	centages: ription:			
Depth 538 566	CONN GAS	TRIP GAS	FROM (ft)	TO (ft)	BEFORE (ft) Deviation	DURING (R)	(t) DEVIAT	BEFORE LIMITS ION SUF	DURING UNITS RVEYS Deviation	LNITS	Sample per Sample Desc	centages: ription:			
Depth 538 566 602 633	Deviation 1.03 1.22 1.20 1.25	Azimuth 184.79 189.53 186.87 188.91	PL Angle 0.19 0.76 0.17 0.21	Depth 1407 1438 1468 1499	Deviation 0.89 0.73 0.84	Azimuth 190.80 190.50 201.30 218.50	DEVIAT DL Angle 1.35 0.39 0.47 0.83	Depth 2244 2275 2306 2337	Deviation 2.24 2.06 2.05	Azimuth 147.80 156.50 158.70 157.60	Sample per Sample Desc	centages: ription:			
Pepth 538 566 602 633 664	Deviation 1.03 1.22 1.20 1.34	Azimuth 184.79 189.53 186.87 188.91 180.49	PL Angle 0.19 0.76 0.17 0.21	Depth 1407 1438 1468 1499 1532	Deviation 0.69 0.75 0.73 0.84 0.51	Azimuth 190.80 190.50 201.30 218.50 206.70	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08	Depth 2244 2275 2306 2337 2367	Deviation 2.27 2.24 2.05 1.95	Azimuth 147.80 156.50 158.70 157.60	Sample per Sample Desc	centages: ription:			
Depth 538 566 602 633 664 695	Deviation 1.03 1.22 1.20 1.34 1.26	Azimuth 184.79 139.53 186.87 188.91 180.49 180.29	PL Angle 0.19 0.76 0.17 0.21	Depth 1407 1438 1468 1499 1532 1563	Deviation 0.69 0.75 0.73 0.84 0.51 0.83	Azimuth 190.80 190.50 201.30 218.50 206.70	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13	Depth 2244 2275 2306 2337 2367 2399	Deviation 2.27 2.24 2.06 2.05 1.48	Azimuth 147.80 156.50 158.70 163.20 170.70	Dt. Angle 0.66 1.11 0.64 0.13 1.62	centages: ription:			
538 566 602 633 664 695 727	Deviation 1.03 1.22 1.20 1.34	Azimuth 184.79 189.53 186.87 188.91 180.49	PL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89	Depth 1407 1438 1468 1499 1532 1563 1595 1626	Deviation 0.69 0.75 0.73 0.84 0.51	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 197.70	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08	Depth 2244 2275 2306 2337 2367	Deviation 2.27 2.24 2.05 1.95	Azimuth 147.80 155.70 157.60 163.20 170.10 171.70	Sample per Sample Desc	centages: ription:			
Depth 538 566 602 633 664 695 727 757 787	Conet GAS Deviation 1.03 1.22 1.20 1.25 1.34 1.26 1.32 1.34 1.33	Azimuth 184.79 189.53 186.87 188.91 180.29 175.83 164.40 162.92	PL Angle 0.19 0.76 0.17 0.21 0.26 0.36 0.36 0.89 0.12	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657	Deviation 0.69 0.75 0.73 0.84 0.85 0.85 0.85 0.81	Azimuth 190.80 190.50 201.30 218.90 206.70 194.00 187.20 196.70 202.10	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29	Depth 2244 2275 2306 2337 2389 2429 2460 2492	DURING UNITS RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.96 0.96	Azimuth 147.80 156.50 155.70 157.00 170.70 171.90	Sample per Sample Desc	centages: ription:			
Depth 538 566 602 633 664 695 727 757 787 817	Deviation 1.03 1.22 1.20 1.34 1.33 1.44	Aximuth 184.79 189.53 186.87 188.91 180.49 180.49 175.83 164.40 162.92 165.82	PL Angle 0.19 0.76 0.17 0.21 0.85 0.26 0.36 0.89 0.12	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1688	Deviation 0.89 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00	Azimuth 190.80 190.50 201.30 218.50 205.70 194.00 187.20 198.70 202.10	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65	Depth 2244 2244 2337 2367 2399 2428 2460 2460 24523	DURING UNITS RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.96 0.96 0.91	Azimuth 147.80 156.50 158.70 157.60 163.20 170.10 171.70 171.90	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01	centages: ription:			
Septh 538 566 602 633 664 695 727 787 787 317	Conet GAS Deviation 1.03 1.22 1.20 1.25 1.34 1.26 1.32 1.34 1.33	Azimuth 184.79 189.53 186.87 188.91 180.29 175.83 164.40 162.92	PL Angle 0.19 0.76 0.17 0.21 0.26 0.36 0.36 0.89 0.12	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657	Deviation 0.69 0.75 0.73 0.84 0.85 0.85 0.85 0.81	Azimuth 190.80 190.50 201.30 218.90 206.70 194.00 187.20 196.70 202.10	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29	Depth 2244 2275 2306 2337 2389 2429 2460 2492	DURING UNITS RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.96 0.96	Azimuth 147.80 156.50 155.70 157.00 170.70 171.90	Sample per Sample Desc	centages: ription:			
Depth 538 566 602 633 664 695 727 757 787 817 844 876 907	Deviation 1.03 1.22 1.20 1.32 1.34 1.33 1.48 1.43 0.94 0.71	Azimuth 184.79 189.53 186.87 188.91 180.29 175.83 164.40 162.92 156.82 143.19 137.08	DL Angle 0.19 0.76 0.17 0.21 0.88 0.26 0.36 0.89 0.12 0.68 1.29 1.86	Depth 1407 1438 1468 1499 1532 1595 1626 1657 1688 1720 1751 1782	Deviation 0.88 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93	Azimuth 190.80 190.50 201.30 218.50 208.70 184.00 187.20 198.70 202.10 179.00 157.80 164.00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 0.43	Depth 2244 2275 2306 2337 2367 2399 2429 2460 2492 2523 2553 2584 2614	DURING UNITS RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.96 0.98 0.99 1.23 1.10 1.30	Azimuth 147.80 156.50 155.70 157.60 163.20 170.70 171.70 171.90 171.20 170.60 163.70 163.70 163.70 163.70	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87 0.87 0.84 0.01 0.17 1.07	centages: ription:			
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Dapth 558 556 602 633 664 695 727 737 317 344 876 907 936	Conet GAS Deviation 1.03 1.22 1.20 1.25 1.34 1.26 1.32 1.34 1.33 1.45 1.43 0.84 0.71 0.86 0.50	Azimuth 184.79 189.53 186.87 183.91 180.29 175.83 184.40 182.92 156.82 143.19 137.08 130.59 112.85	PL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.49 0.12 0.65 1.29 1.88 0.51 0.95	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1688 1720 1751 1775 1782 1813 1844	Deviation 0.89 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05	Azimuth 190.80 190.50 201.30 218.50 290.70 194.00 187.20 196.70 202.10 179.00 157.80 164.00 149.00 153.00	DEVIAT DL Angle 1,35 0.39 0.47 0.83 1.08 1.13 0.29 0.65 1.23 1.04 0.43 1.06 0.59	Depth. 2244 2275 2306 2337 2389 2429 2492 2523 2553 2584 2614 2642	DURING UNITS RVEYS Deviation 2.27 2.24 2.06 2.05 1.48 1.22 0.96 0.96 0.91 1.23 1.10 1.30 1.50	Azimuth 147.80 156.50 155.70 157.60 163.20 170.70 171.90 171.90 171.20 170.60 163.70 163.40 163.40	DL Angle Oscillation Osc	centages: ription:			
>epth 5538 566 602 663 664 6695 727 737 317 344 876 997 997 997 997 1034	Deviation 1 03 1.22 1.20 1.34 1.33 1.44 1.43 0.84 0.71 0.86	Azimuth 184.79 189.53 186.87 188.91 180.49 180.29 175.83 164.40 162.92 143.19 137.03 130.59 112.55	PL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65	Depth 1407 1438 1468 1499 1532 1563 1595 1628 1657 1688 1720 1751 1782 1813	Deviation (b) (c) (c) (d) (d) (d) (d) (d) (d) (d) (d) (d) (d	Azimuth 190.80 190.50 201.30 205.70 194.00 187.20 10 179.00 157.60 164.00 149.00 149.00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.23 1.04 0.43 1.06 0.59 0.83 0.54	Depth 2244 2275 2306 2399 2460 2492 2553 2554 2614 2614 2617 2734 2734 2734	DURING LINES RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.96 0.96 0.91 1.23 1.10 1.30 1.60 1.55 1.60 1.52	Azimuth 147.80 156.50 156.50 157.60 163.20 170.70 171.70 171.90 171.80 163.70 165.40 163.70 163.70	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.30 1.20 0.18 0.48 1.02	centages: ription:			
7 epth 538 556 602 633 664 695 727 787 787 787 814 890 990 991 991 991 991 991 991 991	Conel GAS Deviation 1.03 1.22 1.20 1.25 1.34 1.26 1.32 1.33 1.45 1.43 0.84 0.71 0.86 0.50 0.91 1.00 1.04	Azimuth 184.79 189.53 186.87 180.29 175.83 164.40 162.92 150.52 143.19 137.08 130.59 112.85 107.94 109.50 120.10	PROM (8) DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.40 0.51 0.65 1.04 0.65 0.65 0.62	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1688 1720 1751 1782 1813 1844 1875 1906 1935	Deviation 0.89 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.105 1.18 1.30 1.75	Azimuth 190.80 190.50 201.30 218.50 290.70 194.00 187.20 196.70 202.10 179.00 157.60 148.00 148.00 148.50 152.00	DEVIAT DL Angle 1,35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 0.43 1.06 0.59 0.83 0.54 1.59	Depth 2244 2275 2306 2337 2367 2492 2553 2554 2614 2672 2703 2734 2764	DURING UNITS RVEYS Deviation 2.27 2.24 2.08 2.05 1.48 1.22 0.96 0.91 1.23 1.10 1.30 1.50 1.66 1.82 1.77	Azimuth 147.80 156.80 155.70 157.60 163.20 170.70 171.90 171.20 170.80 163.70 163.70 163.70 163.70	DL Angle Oscillation Osc	centages: ription:			
Depth 538 602 633 664 695 727 757 737 344 376 9907 9907 9907 9908 9909 9911	Conet GAS Deviation 1,03 1,22 1,20 1,26 1,32 1,34 1,43	Azimuth 184.79 189.53 186.87 188.91 180.29 175.83 164.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57	DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.62	Depth 1407 1438 1468 1499 1592 1563 1595 1626 1657 1688 1720 1751 1782 1813 1844 1875 1906 1935 1906	Deviation 0.69 0.75 0.73 0.84 0.95 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.18 1.30 1.75 1.70	Asimuth 190.80 190.50 201.30 218.50 205.70 194.00 187.20 196.70 202.10 202.10 179.00 164.00 149.00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 0.43 1.06 0.59 0.63 0.54 1.59 0.50	Depth 2244 2275 2398 2429 2452 2553 2554 2614 2644 2644 2764 2326	DURING UNITS RVEYS Deviation 2.27 2.24 2.08 2.05 1.95 1.48 1.22 0.96 0.991 1.23 1.10 1.30 1.60 1.50 1.66 1.82 1.77 1.30	Azimuth 147.80 156.50 157.60 157.60 163.20 170.70 170.10 171.70 171.80 163.70 157.40 163.70 163.70 163.70 163.70 163.70 163.70 163.70 163.70 163.70	DL Angle 0.68 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.80 1.120 0.18 0.48 1.02 0.25 0.79	centages: ription:			
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558 602 603 664 695 727 757 737 317 844 876 997 11034 61097 11128 1159 1159 1159 1159 1159 1159 1159 115	Conet GAS Deviation 103 1.22 1.20 1.25 1.34 1.33 1.43 1.43 1.43 1.43 1.43 1.45 1.55	TRIP GAS Azimuth 184.79 189.53 186.87 188.91 180.49 180.29 175.83 164.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70	PROM (N) (N) (N) (N) (N) (N) (N) (N) (N) (N)	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1628 1770 1775 1782 1813 1814 1875 1906 1935 1967 1997 2028 2060	Deviation 0.99 0.75 0.73 0.84 0.95 1.20 1.00 0.88 0.84 0.93 1.12 1.10 1.10 1.10 1.10 1.10 1.10 1.10	Azimuth 190.30 190.50 201.30 211.50 205.70 194.00 187.20 196.70 202.10 179.00 157.60 164.00 149.00 149.00 155.00 161.00 155.40 164.20 154.40	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 0.43 1.06 0.59 0.83 0.54 1.59 0.50 0.39 1.12 1.05	Depth 2244 2275 2306 2337 2367 2399 2460 2492 2523 2553 2584 2614 2614 2672 2703 2734 2764 2826 2356	DURING LINES RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.96 0.96 0.96 0.91 1.23 1.10 1.30 1.50 1.50 1.50 1.50 1.50 1.50 1.50 1.5	Azimuth 147.80 155.50 155.70 157.60 163.20 170.70 171.10 171.90 171.90 157.40 165.40 165.40 165.70 163.70 177.10 177.10 178.90 184.00	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.30 1.20 0.18 0.46 1.02 0.25 0.79 0.94	centages: ription:			
Depth 538 566 602 633 664 727 757 787 344 846 990 990 990 911 1034 1066 1097 1191 1122 1122 1222	Conet GAS Deviation 1.03 1.22 1.20 1.25 1.34 1.32 1.34 1.33 1.43	TRIP GAS Azimuth 184.79 189.53 186.87 188.91 180.49 180.29 175.83 164.40 162.92 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75	PL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.62 1.48 2.30	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1657 1688 1720 1751 1772 1813 1844 1875 1996 1935 1997 2028 2080 2091	Deviation (b) (c) (c) (d) (d) (d) (d) (d) (d) (d) (d) (d) (d	Azimuth 190.80 190.50 201.30 215.90 196.70 197.00 149.00 149.00 149.00 149.00 155.00 146.50 166.00 161.00 165.00 165.00 165.00 165.00 165.00 165.00 165.00 165.00 155.10 150.10 150.10 155.10 155.10 155.10 155.10 150.10 150.10 150.10 155.10 155.10 155.10 155.10 155.10 155.10 155.10 155.10 155.10 155.10 150.10 150.10 150.10 155.10 155.10 155.10 155.10 155.10 155.10 150.10 150.10 150.10 150.10 155.10 155.10 155.10 155.10 155.10 150.10 150.10 150.10 150.10 155.10 1	DEVIAT DLAngle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.12 0.65 1.23 1.04 0.43 1.06 0.59 0.83 0.54 1.59 0.50 0.39 1.12 1.12 1.05 0.26	Depth 2244 2275 2306 2337 2367 2492 2553 2554 2614 2672 2703 2734 2764 2826 2857	DURING UNITS Deviation 2:27 2:24 2:08 2:05 1:95 1:48 1:22 0:96 0:96 0:91 1:30 1:10 1:30 1:58 1:66 1:52 1:77 1:30 1:20 0:90	Azimuth 147.80 156.80 155.70 157.60 163.20 170.70 171.90 171.20 170.80 163.70 157.40 163.10 177.10 177.90 183.10 177.90 184.00	DL Angle 0.68 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.30 1.20 0.18 0.48 0.48 1.02 0.25 0.79 0.94	centages: ription:			
Depth 538 566 602 605 633 664 695 727 757 737 344 876 9907 991 1034 10097 11128 11159 11191 11221 1221 12252	Cone4 GAS Deviation 1.03 1.22 1.20 1.25 1.34 1.28 1.33 1.43 0.34 0.71 0.36 0.50 0.91 1.00 1.04 1.16 1.16 1.16 1.16 0.76 0.27 0.30	TRIP GAS Azimuth 184.79 189.53 186.87 180.49 180.29 175.83 164.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75 203.90	PROM (%) DL Angle 0.19 0.76 0.17 0.21 0.65 0.26 0.36 0.89 0.12 0.88 1.29 1.86 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.62 1.48 2.30 0.51	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1638 1720 1751 1782 1813 1844 1875 1906 1935 1967 1935 1967 1997 2028 2060	Deviation 0.89 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.84 0.93 1.12 1.05 1.18 1.30 1.75 1.70 1.61 1.91 1.88 1.95 1.74	DURING (b) 190.80 190.50 201.30 218.50 194.00 187.20 198.70 202.10 195.70 157.80 145.00 158.00 158.00 158.00 158.00 158.00 158.00 158.00 158.00 158.00 158.00 158.00 158.00 158.00 158.00	DEVIAT PL Angle 1,35 0,39 0,47 0,83 1,08 1,13 0,29 0,65 1,123 1,04 0,43 1,29 0,85 1,23 1,04 0,43 1,06 0,59 0,83 0,54 1,59 0,50 0,59 0,50 0,39 1,12 1,05 0,26 1,03	Depth 2244 2275 2306 2337 2367 2492 2553 2554 2614 2672 2703 2734 2764 2826 2857	DURING UNITS Deviation 2:27 2:24 2:08 2:05 1:95 1:48 1:22 0:96 0:96 0:91 1:30 1:10 1:30 1:58 1:66 1:52 1:77 1:30 1:20 0:90	Azimuth 147.80 156.80 155.70 157.60 163.20 170.70 171.90 171.20 170.80 163.70 157.40 163.10 177.10 177.90 183.10 177.90 184.00	DL Angle 0.68 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.30 1.20 0.18 0.48 0.48 1.02 0.25 0.79 0.94	centages: ription:			
Depth 553 566 602 633 664 727 757 757 317 344 907 936 907 91034 1066 1159 1159 1122 1122 1221 1223 3314	Conet GAS Deviation 1.03 1.22 1.20 1.25 1.34 1.32 1.34 1.33 1.43	TRIP GAS Azimuth 184.79 189.53 186.87 188.91 180.49 180.29 175.83 164.40 162.92 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75	PL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.62 1.48 2.30 0.51 0.58	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1657 1688 1720 1751 1772 1813 1844 1875 1996 1935 1997 2028 2080 2091	Deviation (b) (c) (c) (d) (d) (d) (d) (d) (d) (d) (d) (d) (d	Azimuth 190.80 190.50 201.30 215.90 196.70 197.00 149.00 149.00 149.00 149.00 155.00 146.50 166.00 161.00 165.00 165.00 165.00 165.00 165.00 165.00 165.00 165.00 155.10 150.10 150.10 155.10 155.10 155.10 155.10 150.10 150.10 150.10 155.10 155.10 155.10 155.10 155.10 155.10 155.10 155.10 155.10 155.10 150.10 150.10 150.10 155.10 155.10 155.10 155.10 155.10 155.10 150.10 150.10 150.10 150.10 155.10 155.10 155.10 155.10 155.10 150.10 150.10 150.10 150.10 155.10 1	DEVIAT DLAngle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.12 0.65 1.23 1.04 0.43 1.06 0.59 0.83 0.54 1.59 0.50 0.39 1.12 1.12 1.05 0.26	Depth 2244 2275 2306 2337 2367 2492 2553 2554 2614 2672 2703 2734 2764 2826 2857	DURING UNITS Deviation 2:27 2:24 2:08 2:05 1:95 1:48 1:22 0:96 0:96 0:91 1:30 1:10 1:30 1:58 1:66 1:52 1:77 1:30 1:20 0:90	Azimuth 147.80 156.80 155.70 157.60 163.20 170.70 171.90 171.20 170.80 163.70 157.40 163.10 177.10 177.90 183.10 177.90 184.00	DL Angle 0.68 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.30 1.20 0.18 0.48 0.48 1.02 0.25 0.79 0.94	centages: ription:			
Depth 558 568 602 633 664 6695 727 757 737 344 844 876 9907 9936 991 1034 1066 1097 1191 1122 11221 12221 1223 1331 1433 144 1346	Conet GAS Deviation 1.03 1.22 1.20 1.26 1.34 1.33 1.43 1.43 1.43 1.43 1.43 1.45 1.15	TRIP GAS Azimuth 184.79 189.53 186.87 188.91 180.29 175.88 164.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 185.70 235.75 203.90 173.03	PROM (%) DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.40 0.51 0.95 0.62 0.40 0.53 0.33 0.62 1.48 2.30 0.51 0.58	Depth 1407 1438 1468 1499 1592 1563 1595 1626 1657 1628 1770 1775 1782 1814 1875 1905 1907 1907 1907 2028 2060 2091 2120 2152	Deviation 0.89 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.105 1.18 1.30 1.75 1.70 1.61 1.91 1.88 1.95 1.74	Azimuth 190.30 201.30 211.50 201.30 218.50 205.70 194.00 187.20 196.70 202.10 179.00 149.00	DEVIAT DL Angle 1.35 0.83 0.47 0.83 1.08 1.13 0.29 0.43 1.129 0.65 1.23 1.06 0.59 0.83 0.54 1.59 0.50 0.39 1.12 1.05 0.26 1.03 0.86	Depth 2244 2275 2306 2337 2367 2492 2553 2554 2614 2672 2703 2734 2764 2826 2857	DURING UNITS Deviation 2:27 2:24 2:08 2:05 1:95 1:48 1:22 0:96 0:96 0:91 1:30 1:10 1:30 1:58 1:66 1:52 1:77 1:30 1:20 0:90	Azimuth 147.80 156.80 155.70 157.60 163.20 170.70 171.90 171.20 170.80 163.70 157.40 163.10 177.10 177.90 183.10 177.90 184.00	DL Angle 0.68 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.30 1.20 0.18 0.48 0.48 1.02 0.25 0.79 0.94	centages: ription:			
Depth 558 568 602 633 664 6695 727 757 737 344 844 876 9907 9936 991 1034 1066 1097 1191 1122 11221 12221 1223 1331 1433 144 1346	Conet GAS Deviation 1.03 1.22 1.20 1.25 1.34 1.32 1.34 1.33 1.43 1.43 1.43 1.43 1.43 1.43 1.43 1.45 1.45 1.50	TRIP GAS Azimuth 184.79 189.53 186.87 188.91 180.49 180.29 175.83 164.40 162.92 143.19 137.03 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75 203.90 173.03	PL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.62 1.48 2.30 0.51 0.58	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1657 1688 1720 1751 1782 1813 1844 1875 1996 1935 1997 2028 2080 2091 2152 2183	Deviation (h) (h) (h) (h) (h) (h) (h) (h) (h) (h)	Azimuth 190.80 190.50 201.30 215.90 196.70 197.00 149.00 149.00 149.00 149.00 155.00 146.00 155.40 164.20 154.50 164.00 155.40 164.20 154.50 164.50 1	DEVIAT DLAngle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 1.06 0.59 0.33 0.54 1.59 0.30 0.50 0.39 1.12 1.02 0.65 0.26 1.03 0.86 0.13	Depth 2244 2275 2306 2337 2367 2492 2553 2554 2614 2672 2703 2734 2764 2826 2857	DURING UNITS Deviation 2:27 2:24 2:08 2:05 1:95 1:48 1:22 0:96 0:96 0:91 1:30 1:10 1:30 1:58 1:66 1:52 1:77 1:30 1:20 0:90	Azimuth 147.80 156.80 155.70 157.60 163.20 170.70 171.90 171.20 170.80 163.70 157.40 163.10 177.10 177.90 183.10 177.90 184.00	DL Angle 0.68 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.30 1.20 0.18 0.48 0.48 1.02 0.25 0.79 0.94	centages: ription:			
Depth 558 662 633 664 672 787 787 344 876 997 9907 9936 991 1034 1066 1097 1191 1122 11221 1222 1233 1314	Conet GAS Deviation 1.03 1.22 1.20 1.25 1.34 1.32 1.34 1.33 1.43 1.43 1.43 1.43 1.43 1.43 1.43 1.45 1.45 1.50	TRIP GAS Azimuth 184.79 189.53 186.87 188.91 180.49 180.29 175.83 164.40 162.92 143.19 137.03 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75 203.90 173.03	PL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.62 1.48 2.30 0.51 0.58	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1657 1688 1720 1751 1782 1813 1844 1875 1996 1935 1997 2028 2080 2091 2152 2183	Deviation (h) (h) (h) (h) (h) (h) (h) (h) (h) (h)	Azimuth 190.80 190.50 201.30 218.50 205.70 194.00 187.20 198.70 202.10 202.10 157.60 164.00 155.00 161.00 158.40 164.50 154.40 154.10 154.10 154.10 154.10 155.20	DEVIAT DL Angle 1,35 0,39 0,47 0,83 1,08 1,13 0,29 0,43 1,129 0,65 1,23 1,04 0,43 1,06 0,59 0,83 1,04 1,59 0,83 0,54 1,59 0,50 0,39 1,12 1,05 0,26 1,03 0,86 0,13 1,52	Depth 2244 2275 2306 2337 2584 2614 2642 2703 2734 2644 2872 2703 2734 2826 2836 2837 2919	DURING UNITS RVEYS Deviation 2.27 2.24 2.08 2.05 1.95 1.48 1.22 0.96 0.91 1.23 1.10 1.30 1.50 1.50 1.66 1.82 1.77 1.30 1.20 0.90	Azimuth 147.80 156.80 155.70 157.60 163.20 170.70 171.90 171.20 170.80 163.70 157.40 163.10 177.10 177.90 183.10 177.90 184.00	DL Angle 0.68 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.30 1.20 0.18 0.48 0.48 1.02 0.25 0.79 0.94	centages: ription:			
Depth 538 566 602 633 664 727 757 787 344 876 997 1907 998 1106 1109 11128 11221 1221 1221 1231 1314	Conet GAS Deviation 1.03 1.22 1.20 1.25 1.34 1.32 1.34 1.33 1.43 1.43 1.43 1.43 1.43 1.43 1.43 1.45 1.45 1.50	TRIP GAS Azimuth 184.79 189.53 186.87 188.91 180.49 180.29 175.83 164.40 162.92 143.19 137.03 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75 203.90 173.03	PL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.62 1.48 2.30 0.51 0.58	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1657 1688 1720 1751 1782 1813 1844 1875 1996 1935 1997 2028 2080 2091 2152 2183	Deviation (h) (h) (h) (h) (h) (h) (h) (h) (h) (h)	Azimuth 190.80 190.50 201.30 218.50 205.70 194.00 187.20 198.70 202.10 202.10 157.60 164.00 155.00 161.00 158.40 164.50 154.40 154.10 154.10 154.10 154.10 155.20	DEVIAT DL Angle 1,35 0,39 0,47 0,83 1,08 1,13 0,29 0,43 1,129 0,65 1,23 1,04 0,43 1,06 0,59 0,83 1,04 1,59 0,83 0,54 1,59 0,50 0,39 1,12 1,05 0,26 1,03 0,86 0,13 1,52	Depth 2244 2275 2306 2337 2367 2492 2553 2554 2614 2672 2703 2734 2764 2826 2857	DURING UNITS RVEYS Deviation 2.27 2.24 2.08 2.05 1.95 1.48 1.22 0.96 0.91 1.23 1.10 1.30 1.50 1.50 1.66 1.82 1.77 1.30 1.20 0.90	Azimuth 147.80 156.50 155.70 157.60 163.20 170.70 170.10 171.70 171.20 171.20 155.40 163.70 163.70 163.10 177.70 163.70 163.10 177.90 183.70 163.70 1	DL Angle 0.68 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.30 1.20 0.18 0.48 0.48 1.02 0.25 0.79 0.94	Depth			DLAngle
Depth 538 568 602 633 664 695 727 757 737 317 344 876 907 938 9109 11034 11059 11128 11129 11221 11252 11314 11346 11377	Cone4 GAS Deviation 1.03 1.22 1.20 1.25 1.34 1.26 1.32 1.34 1.33 1.45 1.43 0.84 0.71 0.86 0.50 0.91 1.00 1.04 1.16 1.19 0.76 0.90 0.91 1.01 0.76 0.90 0.95 0.95	TRIP GAS Azimuth 184.79 189.53 186.87 188.91 180.49 180.29 175.83 164.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75 203.90 173.03 172.10 163.30	FROM (8) DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.59 0.12 0.68 1.29 1.04 0.65 0.65 0.62 0.40 0.53 0.33 0.62 1.48 2.30 0.51 0.58 0.28 0.30	TO (ft) Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1688 1720 1751 1782 1813 1844 1875 1906 1935 1967 1997 2028 2060 2091 2152 2153 2213	Deviation 0.89 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.18 1.30 1.75 1.70 1.61 1.91 1.88 1.95 1.97 1.99 2.03 2.42 ASSUMED EFF	DURING (b) Azimuth 190.80 190.50 201.30 218.50 205.70 194.00 187.20 202.10 202.10 202.10 157.80 158.00 158.00 158.00 158.00 158.00 158.00 158.00 158.00 158.00 158.00 158.00 158.00 158.00 158.00 158.00 158.00 158.00 158.00	DEVIAT DL Angle 1,35 0,39 0,47 0,83 1,08 1,13 0,29 0,43 1,129 0,65 1,23 1,04 0,43 1,06 0,59 0,83 1,04 1,59 0,50 0,39 1,12 1,05 0,26 1,03 0,86 0,13 1,52 JMP & G	Depth 2244 2275 2306 2337 2367 2492 2523 2584 2614 2642 2703 2583 2584 2614 2826 2837 2919 2480 2887 2919	DURING LINTS RVEYS Deviation 2.27 2.24 2.08 2.05 1.95 1.48 1.22 0.96 0.91 1.23 1.10 1.30 1.58 1.66 1.82 1.77 1.30 1.50 1.90 0.90 0.90	Azimuth 147.80 156.50 155.70 157.60 163.20 170.70 171.90 171.90 171.20 171.50 163.70 163.10 177.40 163.70 163.10 177.90 183.10 177.90 184.00 195.10 195.10 195.10 195.10 195.10 195.10	Sample per Sample Desc	Depth Depth	Deviation.	Azimuth Azimuth Azimuth	DL Angle
Depth 538 566 602 633 664	Cone4 GAS Cone4 GAS Cone4 GAS Cone4 GAS Cone GA	TRIP GAS Azimuth 184.79 189.53 186.87 188.91 180.49 180.29 175.85 164.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75 203.90 173.03 172.10 163.30	PROM (8) DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.68 1.29 1.85 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.62 1.48 2.30 0.51 0.58 0.28 0.30	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1638 1720 1751 1782 1813 1844 1875 1906 1935 1997 2028 2091 2120 22152 2183 2213	Deviation (h) Deviation 0.689 0.75 0.73 0.84 0.51 0.83 0.84 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.18 1.30 1.75 1.70 1.61 1.91 1.88 1.95 1.74 1.99 2.03 2.42 ASSUMED EFF (%)	Azimuth 190,80 190,50 201,30 201,30 218,50 206,70 194,00 197,20 196,70 202,10 179,00 155,80 156,00 155,00 1	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.06 0.59 0.53 0.54 1.59 0.50 0.39 1.12 1.05 0.26 1.03 0.54 1.59 0.50 0.39 1.12 0.26 0.13 1.52	Depth Dept	DURING UNITS RVEYS Deviation 2.277 2.24 2.06 2.05 1.95 1.48 1.22 0.96 0.96 0.96 1.23 1.10 1.50 1.50 1.50 1.50 1.50 1.50 1.50	Azimuth 147.30 156.50 157.60 157.60 157.60 170.70 170.10 171.70 171.90 171.90 171.90 171.90 183.70 183.70 183.70 183.10 177.10 183.70 183.10 177.90 183.70 1	DL Angle 0.68 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.30 1.20 0.30 0.10 0.79 0.94 1.01 0.72	Depth Depth I tel (Sq in)	Deviation. Deviation.	ANNA R VEI	DL Angle DL Angle COSTY DC (train)
Depth 558 566 602 633 664 727 757 757 737 317 344 876 990 990 997 1034 1066 1015 1125 1125 1221 1221 1331 1434 1346 1377	Cone4 GAS Deviation 1.03 1.22 1.20 1.25 1.34 1.26 1.32 1.34 1.33 1.45 1.43 0.84 0.71 0.86 0.50 0.91 1.00 1.04 1.16 1.19 0.76 0.90 0.91 1.01 0.76 0.90 0.95 0.95	TRIP GAS Azimuth 184.79 189.53 186.87 188.91 180.49 180.29 175.83 164.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75 203.90 173.03 172.10 163.30	FROM (8) DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.59 0.12 0.68 1.29 1.04 0.65 0.65 0.62 0.40 0.53 0.33 0.62 1.48 2.30 0.51 0.58 0.28 0.30	TO (ft) Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1688 1720 1751 1782 1813 1844 1875 1906 1935 1967 1997 2028 2060 2091 2152 2153 2213	Deviation 0.89 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.18 1.30 1.75 1.70 1.61 1.91 1.88 1.95 1.97 1.99 2.03 2.42 ASSUMED EFF	DURING (b) Azimuth 190.80 190.50 201.30 218.50 205.70 194.00 187.20 202.10 202.10 202.10 157.80 158.00 158.00 158.00 158.00 158.00 158.00 158.00 158.00 158.00 158.00 158.00 158.00 158.00 158.00 158.00 158.00 158.00 158.00	DEVIAT DL Angle 1,35 0,39 0,47 0,83 1,08 1,13 0,29 0,43 1,129 0,65 1,23 1,04 0,43 1,06 0,59 0,83 1,04 1,59 0,50 0,39 1,12 1,05 0,26 1,03 0,86 0,13 1,52 JMP & G	Depth 2244 2275 2306 2337 2367 2492 2523 2584 2614 2642 2703 2583 2584 2614 2826 2837 2919 2480 2887 2919	DURING LINTS RVEYS Deviation 2.27 2.24 2.08 2.05 1.95 1.48 1.22 0.96 0.91 1.23 1.10 1.30 1.58 1.66 1.82 1.77 1.30 1.50 1.90 0.90 0.90	Azimuth 147.80 156.50 155.70 157.60 163.20 170.70 171.90 171.90 171.20 171.50 163.70 163.10 177.40 163.70 163.10 177.90 183.10 177.90 184.00 195.10 195.10 195.10 195.10 195.10 195.10	Sample per	Depth Depth	Deviation.	Azimuth Azimuth Azimuth	DL Angle

Jensen 1-18 43-007-30 7/8 LOCATION DATA NWANW Sec 16 T-12S, R-10E 138 FOOTAGES GL KB 660 FML SOF FML 7569 7580 COUNTY, STATE Carbon County, Utah

EVERGREEN OPERATING, INC. DAILY DRILLING REPORT

RIG CONTACT INFORMATION:

OFFICE TRAILER / FAX: 970 942 7543

CONSULTANT HAND CELL: 303 913 1054

DOGHOUSE: 307 258 7315

PUSHER:

DATE SPUD DATE	SAM DEPTH
8/30/2004 8/16/2004	3255
REPORT NO.	24 HR FOOTAGE
14	278
DRLG CONTRACTOR	DAYS SINCE SPUD
Elenburg, Rig 12	14
CONSULTANT	AFE# API#
John C. Lamb	43-007-30718

ACTIVITY AT REPORT TIME:

Drilling ahead

Daily cost cum cost seconds

\$ 24,089 \$ 412,937 \$ -

CH	RONOL O	SY OF DAIL	Y OPERATIONS (06:00 - 06:00 HRS)	SLOW	PUMP RA	TE DATA:		STRIN	G WEIGHT INFO	RMATION:
		HOURS	■ ************************************	Depth	SPM	Pressure	Eff BHA Wt	Rotating:	Slackoff:	Hoisting:
FROM (hrs)	TO (hrs)	(hrs)	Activity:	2937	54	325	43,000	107,000	104,000	108,000
06:00	11:15	5.25	Rotate 2977 - 3042							· · · · · · · · · · · · · · · · · · ·
11:15	12:30	1.25	Slide 3042 - 3054							
12:30	13:15	0.75	Rotate 3054 - 3063							
13:15	13:30	0.25	Service rig							
13:30	16:15	2.75	Rotate 3063 - 3095	-						
16:15	17:30	1.25	Slide 3095 - 3109							
17:30	06:00	12.50	Rotate 3109 - 3255							
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									HV. OF OIL	GAS & MINING
										THE WINNING
TOTAL	HOURS	24.00								

SUMMARY	OF RIG HO	URS
	DAILY	CUM
DESC.	(hrs)	(hrs)
Drill	23.75	224.75
Trip		22.75
Circulate		0.75
Rig Repair		22.75
Rig Service	0.25	4.50
Dev Survey		
NU / ND		8.50
Cement		
Run Casing		
woc		
OH Logging		
Mix Mud		
MI & RU		6.00
RatHole		
Mouse Hole		
Fishing		
Other		0.50
Coring		
Inspect BHA		
Cut drig line		1.25
Wash & Ream		1.25
Drill Cement		6.25
TestBOPE		1.50
woo		
PU/LD BHA		9.25
inspicire equip		3.50
TOTALS	24.00	313.50

	SUMMARY OF DAILY & CUMULATIVE		AILY		CUM		AFE	
COST CODE	DESCRIPTION OF DAILY COSTS		(\$)		(\$)		(\$)	50,
2030.010	Land, Legal, Title, Survey, Arch, Damages, Permits, Signs			<u> </u>				
2030.031	Dirtwork, Road, Location, Pits, Liner							
2030.019	Contract Drilling 9480 / day 392.5 / h cond 5071 26,000 mob sfc 36791	\$	9,480	\$	197,672			
2032.001	Water	\$	297	\$	3,267			
2032.013	Drill Bits, Stabilizers, Reamers	\$	10,000	\$	34,000			
2031.046	Cementing and Services	Л		\$	5,000			
2030.053	Coring and Analysis							
2030.052	Logging							
2030.054	Mud Logging							
2030.037	Rental Equipment	\$	1,501	\$	24,422			
2030.028	Transportation			\$	8,362			
2032.004	Mud and Chemicals	\$	2,011	\$	20,639			
	Directional Services, Mud Motors	poss	ible Cas	\$	82,724			
	Intermediate casing	90%	Ss 10%	Sits	!			
2030.035	Contract Labor	no si	nows	\$	2,920			
2030.022	Engineering / Supervision	\$	800	\$	11,200			
2030.099	Intangible Miscellaneous and Contingencies							
2040.001	Surface Casing			\$	17,790			
2040.004	Production Casing							
1011.000	Float Equipment, Shoes, Centralizers							
1041.000	Wellhead Equipment			\$	4,941			
1073.000	Bottom Hole Pump / Gas Lift / Other							
1104.000	Drivehead, Engine / Motor and Hydraulic Pump / Electric Unit							
2040.052 / 2040.055	Valves and Fittings, Small / Large							
2040.067	Other Surface Equipment							
2040.099	Tangible Miscellaneous and Contingencies							
	TOTAL COSTS	S	24,089	S	412,937	s		

Report#	14	Date:	08/30/04			ILY DR	nsen 1-18	REPU	ΚΙ	-					
	Jan 1 4 (5)		Well Na	IIV.	, 			T RECOR	D	· · · · · · · · · · · · · · · · · · ·	,	· —			
BIT	BIT		1	T I		DEPTH	DEPTH	FOOTAGE	CUM BIT				BIT	В	T GRADING
NO.	SIZE			SERIAL	JETS	ж	our	DRILLED	HOURS	ROP	WOB	RPM	TORQUE	I= Out Dull I oc	Seels Gge Dull C
(9)	(ln)	MFG	TYPE	NO.	(32/32/32)	(k)	(ft)	(A)	(hrs)	(f/hr) 12.7	36 - 43	MTR/TBL 45 / 60	(R - Hos) 2100 - 2900		
1	12 1/4	Security	XL18N	754840 10408516	14 / 14 / 14 / 1 18 / 18 / 18	1,799	1,799 2,698	1,305 899	102.75 83.25	10.8	35 - 40	45 / 45-70	1400 - 2200		
2	12 1/4	Security Smith	XL43 F4	MT6085	18 / 18 / 18	2,698	3,255	557	48.25	11.5	35 - 40	45 / 60	1600 - 2550		
3	12 1/4	Siliui	1	111111111111111111111111111111111111111	147, 147, 1-			0		#DIV/0!				-	
								0		#OIV/0!					
			ļ				<u> </u>	0		#DIV/0!		 			
COMIN	ENTS					<u> </u>				MDIV/O:					
	AL EQUIP	MENT I			-		F			CASING L	ATA				
RENTAL	DAILY	CLM							EXTERNAL	INTERNAL		LENGTH	TOP SET AT	BOTTOM SET AT	
/TEM	COSTS	costs		SIZE	WEIGHT	GRADE	CONIN	DRIFT ID	COLLAPSE	VIELD (mail)	CAPACITY (bbls/ft)	(R)	(A)	(fl KB)	
4.9	(\$)	(5)		30	NA	NA.			(psi)	(psi)	(00401)	40.00	0.00	40.00	
ving Qfrs	\$ 315 \$ 45	\$ 4,470 \$ 620		13 3/8"	54.5	J55	ST&C_	12.459	1,130	2,730	0.15450	500.00	2.00	498.00	
Tank	\$ 60											ļ. — —			
ajohn	\$ 20	\$ 280										<u> </u>			
Trailer	\$ 50	\$ 700	100					8	оттомно	LE ASSE	ABLY.		138		
Cleaner	\$ 375 \$ 100	\$ 6,250 \$ 1,400	-			T				MAXIMUM	MINIMUM				
dnller	\$ 90	\$ 1,260	Lagarette (Fig.					THRE	AD SIZE	O.D.	۵.۱	LENGTH	- 100	HRS SINCE	
nud clnr		\$ 375	DES	CRIPTION OF	BHA	PRO\		вох	PIN	(in)	(in)	. (A)	HOURS RUN	INSPECTION	
collars	\$ 196	\$ 4,977		Bit			nith	0.5/0.5	6 5/8 R	12.250		1.25		-	
ok Sub	\$ 250	\$ 3,250	7/8 Lobe 4.5	Float Sub	g Mud Motor		k Max DI	6 5/8 R 6 5/8 R	6 5/8 R 6 5/8 R	8,000	3.000	3,02			
			G	iffith Shock	Sub		idle	6 5/8 R	6 5/8 R	8.000	2.688	9,43			
				onel Drill Co			DI	6 5/8 R	6 5/8 R	8.000	3.250	30.58			
				Off Sub & G			DI	6 5/8R	6 5/8 R	7.750	3.750	8.94			-
				ΧO			DI	6 5/8 H90	6 5/8 R	8.000	3.250	2.35 340.02		-	
-			7 - 7	7 3/4" Drill C	ollars			6 5/8 H90 4 1/2 XH	6 5/8 H90 6 5/8 H90	7.750 7.750	2.250	2.35	 		
OTALS	\$ 1,501	\$ 24,422	10 -	6 1/2 Drill C	ollars		ig	4 1/2 XH 4 1/2 XH	4 1/2 XH	6.500	2.250	309.53			
		Association (Control	For acres			4 2 2 2 2	DRILLIN	G MUD R	EPORT		. 465.				14.1
AMPLE	n de de	MUO	PUNNEL			GEL	FRITRATE	1.34	CAKE		SANO	Fig.			LCM
DEPTH	TME	WT.	VISCOSITY	PV/YP	KCL (M)	STRENGTH (Ib/100 ft2)	API (ml/30 min)	CALCIUM (ppm)	THICKNESS (/3Z in)	80LID6	CONTENT (% vol)	≱H	CHLORIDES (ppm)	ALKALINITY Pf/Mf	LCM (b/gal
(t) 3,015	(hh:mm) 09:00	(ppg) 9.30	(sec/qt) 40	10 / 10	1.80	4 / 10	14.0	20	2	6.0	1/4	10.0	12,000	1.2/4	
3,013	03.00	0.00													
				اا			1	L				1			L
Made		· Ning		1		DA	ILY MUD	COST & I	NVENTOR	Y					TOTAL
			BARITÉ	QUICK GEL	CAUSTIC	LIME	SODA ASH	UNIDRILL	SOLKWICK	PAC-R	PHPA	CEDAR	TRUCKING		COSTS
		1.0000	(s×)	(ex)	(*x)	(#X)	(sx)	(sx)	(sx)	(sx)	(g≠)	(sx)	viiil iiii		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
T COST						<u> </u>									
ENTORY RE			120	 											
ED LAST 24											I				
IDING INVEN	TORY			ļ							 	├			
ILY MUD CO	ST														
						 									1.
	MULATIVE COST	г													2
	MULATIVE COST	r					MUDLO	GGER R	PORT						
MULATIVE N	MULATIVE COST	Unitis)	SHOWINTE			OF PENETRATI	ON		SHOW GAS DA						
MULATIVE N MUD BACK	MULATIVE COST GAS DATA (In). CONN	Ints)	FROM	10	BEFORE	DURING	ON AFTER	BEFORE	SHOW GAS DA DURING	AFTER	Formation '	Tops:	possible C	astiegate at 309	2
MULATIVE N MUD BACK GROUND	MULATIVE COST MUD COST GAS DATA (in l	Unitis)				· · · · · · · · · · · · · · · · · · ·	ON		SHOW GAS DA		Formation Sample per		90% Ss 10*	astlegate at 309	2
MULATIVE N MUD BACK	MULATIVE COST GAS DATA (In). CONN	Ints)	FROM	10	BEFORE	DURING	ON AFTER	BEFORE	SHOW GAS DA DURING	AFTER		centages:			2
MULATIVE N MUD BACK BROUND	MULATIVE COST GAS DATA (In). CONN	Ints)	FROM	10	BEFORE	DURING	ON AFTER	BEFORE	SHOW GAS DA DURING	AFTER	Sample per	centages:	90% Ss 10*		2
MULATIVE N MUD BACK SROUND	MULATIVE COST GAS DATA (In). CONN	Ints)	FROM	10	BEFORE	DURING	ON AFTER	BEFORE	SHOW GAS DA DURING	AFTER	Sample per	centages:	90% Ss 10*		2
MULATIVE N MUD BACK BROUND	MULATIVE COST GAS DATA (In). CONN	Ints)	FROM	10	BEFORE	DURING	ON AFTER (R)	BEFORE	SHOW GAS DA DURTING UNITS	AFTER	Sample per	centages:	90% Ss 10*		90'
MUD MUD BACK ROUND 10-30	GAS DATA (In I	TRIP GAS Azimuth	FROM (4)	yo (ft)	BEFORE (ft)	DURING (A) Azimuth	ON AFTER (R) DEVIAT	BEFORE UNITS ION SU	DUPING UNIS UNIS RVEYS Deviation	AFTER UNITS Azimuth	Sample per Sample Desc	centages: ription:	90% Ss 10° no shows	% Sitst	90' DL Angle
MILLATIVE M MILLO BACK ROUND 10-30 Depth 538	GAS DATA (in) CONN GAS Deviation 1.03	Azimuth.	FROM (ft) DL Angle 0.19	70 (ft) Depth 1407	BEFORE (n) Deviation 0.69	Azimuth 190.80	ON AFTER (R) DEVIAT DL Angle 1.35	BEFORE UNITS ION SU Depth 2244	Deviation 2.27	Azimuth	Sample per Sample Desc	Centages: ription:	90% Ss 10° no shows Deviation	Azimuth	90'
MUD BACK ROUND 10-30 Depth 538	ALLATIVE COST GAS DATA (In It CONN GAS Deviation 1.03 1.22	Azimuth 134.79 159.53	PL Angle 0.19 0.76	Depth 1407 1438	Deviation 0.69 0.75	Azimuth 190.80 190.50	ON AFTER (R) DEVIAT DL Angle 1.35 0.39	BEFORE UNITS ION SU	DUPING UNIS UNIS RVEYS Deviation	AFTER UNITS Azimuth	Sample per Sample Desc	centages: ription:	90% Ss 10° no shows	% Sitst	DL Angle 0.96
MUD BACK ROUND 10-30 Depth 538	GAS DATA (in) CONN GAS Deviation 1.03	Azimuth.	FROM (ft) DL Angle 0.19	70 (ft) Depth 1407	BEFORE (n) Deviation 0.69	Azimuth 190.80	ON AFTER (R) DEVIAT DL Angle 1.35	Depth 2244 2275	Deviation 2.27 2.24	Azimuth 147.80 156.50 153.70 157.60	Sample per Sample Description	Depth 3103 3133	90% Ss 10° no shows Deviation 1.06 1.02	Azimuth 174.90 175.60	DL Angle 0.96 0.14
MULATIVE N MULO BACK ROUND 10-30 Depth 538 566 602	GAS DATA (in to CON) GAS DATA (in to CON) GAS Deviation 1.03 1.22 1.20	GAS GAS Azimuth 134.79 139.53 186.37	DL Angle 0.19 0.76 0.17 0.21 0.68	Depth 1407 1438 1468 1499	Deviation 0.69 0.75 0.73 0.84 0.51	Azimuth 190.80 190.50 201.30 218.50 206.70	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08	Depth 2244 2275 2306 2337 2367	RVEYS Deviation 2.27 2.24 2.05 1.95	Azimuth 147.80 156.50 158.70 163.20	Sample per Sample Description	Depth 3103 3133 3165	90% Ss 10° no shows Deviation 1.06 1.02 1.15	Azimuth 174.90 175.60 174.00	DL Angle 0.96 0.14 0.42
MUD BACK ROUND 10-30 Septh 538 566 602 633 664 695	GAS DATA (nr.) GAS DATA (nr.) CONN GAS Deviation 1.03 1.22 1.20 1.25 1.34 1.28	Azimuth 184.79 186.37 186.37 180.49 180.49	DL Angle 0.19 0.76 0.17 0.21 0.88 0.26	Depth 1407 1438 1469 1532 1563	Deviation 0.69 0.75 0.73 0.64 0.51	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13	Depth 2244 2275 2306 2397 2399	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48	Arten UNITS Azimuth 147.80 156.50 158.70 157.60 163.20 170.70	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62	Depth 3103 3133 3165	90% Ss 10° no shows Deviation 1.06 1.02 1.15	Azimuth 174.90 175.60 174.00	DL Angle 0.96 0.14 0.42
MILE NO. 10-30 Depth 538 566 602 633 664 695 727	GAS DATA (n) L GAS DATA (n) CONN GAS Deviation 1.03 1.22 1.25 1.34 1.38 1.32	Azimuth. 184.79 19.53 186.87 180.49 175.88	DL Angle 0.19 0.78 0.17 0.21 0.68 0.26 0.36	Depth 1407 1438 1468 1499 1532 1563	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29	ION SU Depth 2244 2275 2306 2337 2367 2399 2429	DUINNG UNITS RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22	Azimuth 147.80 156.50 157.60 163.20 170.70 170.10	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87	Depth 3103 3133 3165	90% Ss 10° no shows Deviation 1.06 1.02 1.15	Azimuth 174.90 175.60 174.00	DL Angle 0.96 0.14 0.42
MUD SACK ROUND 10-30 10-30 538 566 602 633 664 695 727 757	Deviation	Azimuth 184.79 189.53 186.37 180.49 180.29 175.88 164.40	DL Angle 0.19 0.76 0.17 0.21 0.68 0.28 0.39	Depth 1407 1438 1468 1499 1532 1563 1595 1626	Deviation 0.75 0.73 0.84 0.51 0.83 0.85 0.81	Azimuth 190.80 190.50 201.50 206.70 194.00 187.20 195.70	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43	Depth 2244 2275 2306 2337 2367 2392 2429 2460	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.96	Arten UNITS Azimuth 147.80 156.50 158.70 157.60 163.20 170.70	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62	Depth 3103 3133 3165	90% Ss 10° no shows Deviation 1.06 1.02 1.15	Azimuth 174.90 175.60 174.00	DL Angle 0.96 0.14 0.42
MUD BACK ROUND 10-30 538 566 602 664 695	GAS DATA (n) L GAS DATA (n) CONN GAS Deviation 1.03 1.22 1.25 1.34 1.38 1.32	Azimuth. 184.79 19.53 186.87 180.49 175.88	DL Angle 0.19 0.78 0.17 0.21 0.68 0.26 0.36	Depth 1407 1438 1468 1499 1532 1563	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29	ION SU Depth 2244 2275 2306 2337 2367 2399 2429	DUINNG UNITS RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22	Azimuth 147.80 156.50 157.60 163.20 170.70 170.10	DL Angle O.66 O.64 O.13 O.73 O.87 O.84 O.84 O.85 O.87 O.84 O.84 O.85 O.8	Depth 3103 3133 3165	90% Ss 10° no shows Deviation 1.06 1.02 1.15	Azimuth 174.90 175.60 174.00	DL Angle 0.96 0.14 0.42
MUD BACK ROUND 10-30 Depth 538 566 602 633 664 695 727 787	GAS DATA (nr. 1) GAS DATA (nr. 1) GAS DATA (nr. 1) GAS DATA (nr. 1) GAS Deviation 1.03 1.22 1.20 1.25 1.34 1.34 1.33	Azimuth 184.79 196.37 186.97 180.49 180.49 180.49 180.49 180.29 175.88	PL Angle 0,19 0,76 0,17 0,21 0,68 0,26 0,39 0,12 0,68 1,29	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1857 1868 1720	Deviation 0.75 0.73 0.84 0.51 0.85 0.85 0.81 1.20 0.88	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 196.70 202.10 202.10 179.00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23	Depth 2244 2275 2306 2397 2429 2420 2453 2553	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.96 0.96 0.91 1.23	Arter UNITS Azimuth 147.80 156.50 157.60 163.20 170.70 171.70 171.90 171.90 170.60	DL Angle 0.66 1.11 0.73 1.62 0.84 0.01 0.17 1.07	Depth 3103 3133 3165	90% Ss 10° no shows Deviation 1.06 1.02 1.15	Azimuth 174.90 175.60 174.00	DL Angle 0.96 0.14 0.42
MILO BACK BACK BACK BACK BACK BACK BACK BACK	######################################	Azimuth 184.79 180.49 180.49 180.49 180.49 180.29 175.88 166.82 166.82 143.19 137.08	DL Angle 0.19 0.76 0.17 0.21 0.88 0.26 0.36 0.36 0.49 0.12 0.68 1.29	Depth 1407 1438 1468 1499 1532 1563 1595 1688 1687 1688 17751	Deviation 0.69 0.75 0.73 0.84 0.85 0.85 1.20 1.00 0.88 0.84	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 196.70 202.10 202.10 179.00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04	Depth 2244 2275 2306 2397 2499 2492 2523 2584	Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.96 0.96 0.91 1.23 1.10	Azmuth 147.80 156.50 158.70 170.70 170.10 171.70 171.70 171.70 171.70 171.80 171.80 170.80 183.20	Sample per Sample Desc	Depth 3103 3133 3165	90% Ss 10° no shows Deviation 1.06 1.02 1.15	Azimuth 174.90 175.60 174.00	DL Angle 0.96 0.14 0.42
MADD SPRING NO. 10-30 10	Deviation	Azimuth. 184.79 189.53 186.87 180.49 175.88 164.40 162.92 156.82 143.19 137.08 130.59	DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51	Depth 1407 1438 1468 1499 15563 1595 1626 1857 1688 1720 1751 1772	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 196.70 202.10 179.00 157.60 164.00	DEVIAT OL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 1.65 1.23 1.04 0.43	Depth 2244 2275 2306 2337 2367 2499 2429 24523 2553 2554 2614	DUNNS UNITS Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.96 0.96 0.99 1.23 1.10 1.30	Azmuth 147.80 156.50 157.60 170.70 170.10 171.70 171.20 170.60 163.70 157.40	DL Angle O.66 O.13 O.73 O.87 O.84 O.17 O.17 O.62 O.80 O.8	Depth 3103 3133 3165	90% Ss 10° no shows Deviation 1.06 1.02 1.15	Azimuth 174.90 175.60 174.00	DL Angle 0.96 0.14 0.42
MALANYE M MALON MALON eviation Control Co	Azimuth 184.79 189.53 186.87 18.89 110.29 175.88 164.40 162.92 143.19 137.08 130.59 112.85	PL Angle 0,19 0,78 0,17 0,21 0,68 0,26 0,38 0,89 0,12 0,68 1,29 1,88 0,51	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1751 1772 1513	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 1.20 0.86 0.86 0.86 0.87	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 196.70 202.10 202.10 179.00 157.60 164.00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 1.23 1.04 0.43 1.06	Depth 2244 2275 2306 2492 2460 2492 2553 2564 2644 2644	RVEYS Deviation 2.27 2.24 2.06 1.95 1.48 1.22 0.98 0.98 0.99 1.23 1.10 1.30 1.60	Azmuth 147.80 156.50 158.70 170.70 170.10 171.70 171.70 171.70 171.70 171.80 171.80 170.80 183.20	Sample per Sample Desc	Depth 3103 3133 3165	90% Ss 10° no shows Deviation 1.06 1.02 1.15	Azimuth 174.90 175.60 174.00	DL Angle 0.96 0.14 0.42	
MCANCE MACK AROUND 10-30 Depth 538 660 663 663 664 665 727 767 817 847 847 847 897 997	Deviation	Azimuth. 184.79 189.53 186.87 180.49 175.88 164.40 162.92 156.82 143.19 137.08 130.59	DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51	Depth 1407 1438 1468 1499 15563 1595 1626 1857 1688 1720 1751 1772	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 196.70 202.10 179.00 157.60 164.00	DEVIAT OL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 1.65 1.23 1.04 0.43	Depth 2244 2275 2306 2337 2367 2499 2429 24523 2553 2554 2614	DUNNS UNITS Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.96 0.96 0.99 1.23 1.10 1.30	Azimuth 147.80 156.50 158.70 170.70 171.90 170.80 163.70 153.70 163.70 163.70 163.70 163.70 163.70 163.70 163.70 163.70 163.70 163.70 163.40 163.40	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.84 0.01 0.17 1.07 0.62 0.80 1.20	Depth 3103 3133 3165	90% Ss 10° no shows Deviation 1.06 1.02 1.15	Azimuth 174.90 175.60 174.00	DL Angle 0.96 0.14 0.42
MACO Depth 538 566 602 633 664 605 727 757 781 847 847 847 997 938 697 11034	######################################	Azimuth. 184.79 189.53 186.87 183.91 180.49 180.29 175.88 164.40 162.92 143.19 137.08 130.59 112.85 107.94	PL Angle 0,19 0,76 0,17 0,21 0,68 0,26 0,38 0,89 0,12 0,68 1,29 1,88 0,51 0,95 1,04 0,65 0,62	Depth 1407 1438 1468 1499 1532 1563 1595 1628 1638 1720 1751 1751 1313 1344 1875 1906	Deviation (6) 0.69 0.75 0.73 0.84 0.51 0.83 0.85 1.20 0.88 0.84 0.93 1.12 1.00 1.08 0.84 1.12 1.10 1.10 1.10 1.10 1.10 1.10 1.10	Azimuth. 190.80 190.50 201.30 218.50 206.70 194.00 187.70 202.10 202.10 179.00 157.60 164.00 145.00 146.50 156.00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.23 1.04 0.65 1.23 1.04 0.59 0.83 0.59	Depth 2244 2275 2306 2492 2460 2492 2523 2553 2584 2614 2614 2614 2672 2703 2734	RVEYS Deviation 2.27 2.24 2.06 1.95 1.48 0.96 0.96 0.96 1.23 1.10 1.30 1.60 1.58 1.66 1.82	Azimuth 147.80 156.50 158.70 177.10 171.90 163.70 163.70 163.70 163.70 163.70 163.70 163.70 177.17 1	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 1.07 0.62 0.80 1.20 0.18 0.48 1.02	Depth 3103 3133 3165	90% Ss 10° no shows Deviation 1.06 1.02 1.15	Azimuth 174.90 175.60 174.00	DL Angle 0.96 0.14 0.42
MOD Depth 10-30 De	######################################	Azimuth 184.79 180.37 186.91 180.49 150.29 175.88 164.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 126.70	PL Angle 0.19 0.76 0.17 0.21 0.88 0.29 0.36 0.39 0.112 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1658 1770 17751 1782 1313 1344 1375 1935	Deviation 0.69 0.75 0.73 0.84 0.85 0.85 1.20 1.00 0.84 0.93 1.12 1.05 1.18 1.30 1.75	Azimuth 190.80 190.80 201.30 218.50 201.37 194.00 187.20 196.70 202.10 197.00 157.60 164.00 149.00 158.00 146.50 156.00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 1.29 0.43 1.29 0.65 1.23 1.04 0.43 1.04 0.43 1.06 0.59 0.83	Depth 2244 2275 2306 2337 2367 2399 2429 2450 2553 2554 2614 2672 2703 2734 2764	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.96 0.96 0.91 1.23 1.10 1.30 1.58 1.68 1.82 1.77	Azimuth 147.80 156.50 158.70 157.60 163.20 170.70 171.70 171.70 171.80 163.70 163.70 163.70 163.70	Sample per Sample Desc.	Depth 3103 3133 3165	90% Ss 10° no shows Deviation 1.06 1.02 1.15	Azimuth 174.90 175.60 174.00	DL Angle 0.96 0.14 0.42
MACK NOUND 10-30 Septh 10-30 S	Deviation 1.03 1.22 1.20 1.32 1.34 1.43 1.	Azimuth. 184.79 189.53 186.87 180.49 180.29 175.88 164.40 182.92 156.82 143.19 130.59 112.85 107.94 109.50 120.10 126.70 132.57	DL Angle 0,19 0,19 0,17 0,21 0,21 0,38 0,26 0,38 0,89 0,12 0,68 1,29 1,88 0,51 0,95 1,04 0,65 0,62 0,40 0,53	Depth 1407 1438 1468 1499 1592 1583 1595 1688 1770 1751 1782 1813 1844 1875 1906 1906 1967	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 1.20 1.00 0.88 0.84 0.93 1.12 1.105 1.18 1.30 1.75	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 196.70 202.10 179.00 157.60 164.00 149.00 149.00 158.00 158.00 158.00 158.00 158.00 158.00 158.00	DEVIAT OL Angle 1,35 0,39 0,47 0,83 1,08 1,13 0,29 0,43 1,29 1,29 1,29 1,04 1,04 1,06 1,06 1,06 1,06 1,06 1,06 1,06 1,06	Depth 2244 2275 2306 2337 2367 2429 2452 2553 2554 2614 2644 2672 2703 2734 2764 2826	DURING LINES DAVISTON CASE DAV	Azimuth 147-80 156-50 158-70 157-80 163-20 170-70 171-190 171-190 171-190 163-7	Sample per Sample Desc	Depth 3103 3133 3165	90% Ss 10° no shows Deviation 1.06 1.02 1.15	Azimuth 174.90 175.60 174.00	DL Angle 0.96 0.14 0.42
MUD epth 538 566 602 633 664 6727 757 787 817 844 976 971 936 971 1066 1097 1034 1159	Deviation Const.	Azimuth. 184.79 189.53 186.87 183.91 180.49 190.29 175.88 164.40 182.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57	PL Angle 0.19 0.76 0.17 0.21 0.88 0.29 0.36 0.39 0.112 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1637 1720 1751 1792 1313 1344 1375 1906 1935 1997	Deviation (6) 0.69 0.75 0.73 0.84 0.51 0.83 0.85 1.20 0.88 0.84 0.93 1.12 1.05 1.105 1.106 1.107 1.106	Azimuth. 190.80 190.50 201.30 218.50 206.70 194.00 187.70 202.10 202.10 179.00 155.60	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.23 1.04 0.43 1.06 0.59 0.83 0.54 1.59 0.50 0.39	Depth 2244 2275 2306 2337 2367 2399 2429 2450 2553 2554 2614 2672 2703 2734 2764	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.96 0.96 0.91 1.23 1.10 1.30 1.58 1.68 1.82 1.77	Azimuth 147.80 156.50 158.70 157.60 163.20 170.70 171.70 171.70 171.80 163.70 163.70 163.70 163.70	Sample per Sample Desc.	Depth 3103 3133 3165	90% Ss 10° no shows Deviation 1.06 1.02 1.15	Azimuth 174.90 175.60 174.00	DL Angle 0.96 0.14 0.42
MOD Depth 10-30 10	######################################	Azimuth. 184.79 189.53 186.87 180.49 180.29 175.88 164.40 182.92 156.82 143.19 130.59 112.85 107.94 109.50 120.10 126.70 132.57	DL Angle 0,19 0,78 0,17 0,21 0,68 0,26 0,38 0,89 0,12 1,88 0,51 0,95 1,04 0,65 0,65 0,62 0,40 0,53	Depth 1407 1438 1468 1499 1592 1583 1595 1688 1770 1751 1782 1813 1844 1875 1906 1906 1967	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 1.20 1.00 0.88 0.84 0.93 1.12 1.105 1.18 1.30 1.75	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 196.70 202.10 179.00 157.60 164.00 149.00 149.00 158.00 158.00 158.00 158.00 158.00 158.00 158.00	DEVIAT OL Angle 1,35 0,39 0,47 0,83 1,08 1,13 0,29 0,43 1,29 1,29 1,29 1,04 1,04 1,06 1,06 1,06 1,06 1,06 1,06 1,06 1,06	Depth 2244 2275 2306 2492 2460 2492 2523 2553 2564 2614 2614 2614 2626 2656 2656	Deviation 2.27 2.24 2.06 2.05 1.95 1.48 0.99 1.22 0.96 0.96 1.23 1.10 1.30 1.60 1.58 1.66 1.62 1.77 1.30 1.20 1.20	Azimuth 147.80 156.50 158.70 177.10 171.90 157.40 163.70 1	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 0.62 0.80 1.20 0.18 0.48 1.02 0.25 0.79 0.94	Depth 3103 3133 3165	90% Ss 10° no shows Deviation 1.06 1.02 1.15	Azimuth 174.90 175.60 174.00	DL Angle 0.96 0.14 0.42
MACA MACA MACA MACA MACA MACA MACA MACA	Deviation Const.	Azimuth 184.79 180.37 188.91 190.53 186.87 180.49 150.29 175.88 164.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 120.70 132.57 132.57	DL Angle 0,19 0,78 0,17 0,21 0,68 0,26 0,38 0,89 0,12 0,68 1,29 1,88 0,51 0,95 1,04 0,65 0,62 0,40 0,53 0,33 0,62 0,41 0,53 0,33 0,62 1,43 0,53	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1857 1638 17720 1751 1762 1313 1344 1875 1996 1935 1967 19228	Deviation (%) (%) (%) (%) (%) (%) (%) (%) (%) (%)	Azimuth 190.80 190.80 201.30 218.50 201.30 218.50 202.00 194.00 187.20 199.70 202.10 197.90 157.60 164.00 146.50 158.00 158.00 158.00 158.00 158.00 158.00 158.00 158.00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.23 1.04 0.43 1.06 0.59 0.83 0.54 1.59 0.83 0.54 1.59 0.50 0.39	Depth 2244 2275 2306 2337 2367 2397 2429 2460 2492 2523 2553 2564 2614 2614 2614 2614 2614 2614 2614 26	Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.96 0.96 1.23 1.10 1.50 1.50 1.50 1.50 1.50 1.50 1.50	Azimuth 147.80 156.50 158.70 170.70 171.90 175.40 163.70 1	DL Angle O.66 1.11 O.64 O.13 O.73 O.84 O.01 O.17 O.62 O.80 O.18 O.19 O.1	Depth 3103 3133 3165	90% Ss 10° no shows Deviation 1.06 1.02 1.15	Azimuth 174.90 175.60 174.00	DL Angle 0.96 0.14 0.42
MOD Depth 538 602 633 604 695 777 767 817 844 876 997 1034 1097 1128 11191 1121 1121 1221 1223	######################################	Azimuth 184.79 189.53 186.87 18.91 190.53 186.87 180.99 175.88 194.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 120.70 132.57 137.30 141.51 165.70 235.75 203.90	PL Angle 0.19 0.76 0.17 0.21 0.68 0.28 0.38 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.62 1.43 2.30 0.51	Depth 1407 1438 1468 1499 1532 1563 1595 1626 17720 1751 17782 1813 1844 1875 1996 1935 1967 1997 2028 2060 2091 2120	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.84 0.93 1.12 1.05 1.18 1.30 1.75 1.76 1.91 1.88	Azimuth 190.80 190.80 190.80 201.30 218.50 201.30 194.00 187.20 194.00 157.60 164.00 146.50 158.00 158.00 158.00 158.00 158.00 158.00 158.00 158.00 158.00 158.00 158.00 158.00 158.00 158.00 158.00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.43 1.29 0.65 1.23 1.04 0.43 1.09 0.59 0.80 0.59 0.80 1.10 0.59 0.80 0.59 0.80 0.59 0.80 0.50 0.80 0.50 0.80 0.50 0.80 0.50 0.80 0.8	Depth 2244 2275 2306 2397 2429 2460 2492 2523 2553 2584 2614 2672 2703 2734 2764 2826 2887 2919 2951 2981	RVEYS Deviation 2.27 2.24 2.06 1.95 1.48 1.22 0.96 0.96 0.91 1.30 1.60 1.58 1.60 1.58 1.60 1.77 1.30 1.20 0.90 0.90	Azimuth 147.80 156.50 158.70 170.70 171.00 170.50 163.70 168.10 177.10 177.90 168.10 177.10 177.90 169.10 199.10 177.10 177.90 169.10 177.10 177.90 189.10 199.10 1	Sample per Sample Desc.	Depth 3103 3133 3165	90% Ss 10° no shows Deviation 1.06 1.02 1.15	Azimuth 174.90 175.60 174.00	DL Angle 0.96 0.14 0.42
MACA MACA MACA MACA MACA MACA MACA MACA	Deviation CONN GAS	Azimuth 184.79 189.53 186.87 188.91 180.49 150.68 164.40 162.92 175.88 164.40 162.92 175.87 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75 203.90 173.03	DL Angle 0.19 0.76 0.17 0.21 0.88 0.28 0.38 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.62 1.43 2.30 0.51	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1688 1770 17751 1782 1813 1844 1875 1906 1935 1987 1987 2028 2080 2091 2120 2152	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 1.00 1.12 1.18 1.30 1.75 1.76 1.61 1.91 1.88 1.95	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 196.70 202.10 179.00 157.60 164.00 145.00 155.00 161.00 158.40 154.10 155.20	DEVIAT DL Angle 1,35 0,39 0,47 0,83 1,08 1,13 0,29 0,43 1,29 0,65 1,23 1,04 0,43 1,09 0,85 1,00 1,00 1,00 1,00 1,00 1,00 1,00 1,0	Depth 2244 2275 2306 2337 2367 2399 2429 2452 2523 2553 2553 2554 2614 2644 2672 2703 2734 2764 2826 2826 2827 2919 2951 2981 3013	DURING LINTS DEVIATION LINTS DEVIATION 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.98 0.96 0.91 1.30 1.60 1.50 1.60 1.50 1.60 1.70 1.30 1.00 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90	Azimuth 147.80 156.50 158.70 157.60 163.20 170.70 171.10 171.70 171.70 175.40 163.70 1	Sample per Sample Desc.	Depth 3103 3133 3165	90% Ss 10° no shows Deviation 1.06 1.02 1.15	Azimuth 174.90 175.60 174.00	DL Angle 0.96 0.14 0.42
MUD Depth 538 566 602 633 664 602 727 757 817 847 847 819 907 936 11159 11159 11159 11159 11159 11252 1223 1314 1346	######################################	Azimuth 184.79 189.53 186.87 18.91 190.53 186.87 180.99 175.88 194.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 120.70 132.57 137.30 141.51 165.70 235.75 203.90	PL Angle 0.19 0.76 0.17 0.21 0.68 0.28 0.38 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.62 1.43 2.30 0.51	Depth 1407 1438 1468 1499 1532 1563 1595 1626 17720 1751 17782 1813 1844 1875 1996 1935 1967 1997 2028 2060 2091 2120	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.84 0.93 1.12 1.05 1.18 1.30 1.75 1.76 1.91 1.88	Azimuth 190.80 190.80 190.80 201.30 218.50 201.30 194.00 187.20 194.00 157.60 164.00 146.50 158.00 158.00 158.00 158.00 158.00 158.00 158.00 158.00 158.00 158.00 158.00 158.00 158.00 158.00 158.00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.43 1.29 0.65 1.23 1.04 0.43 1.09 0.59 0.80 0.59 0.80 1.10 0.59 0.80 0.59 0.80 0.59 0.80 0.50 0.80 0.50 0.80 0.50 0.80 0.50 0.80 0.8	Depth 2244 2275 2306 2397 2429 2460 2492 2523 2553 2584 2614 2672 2703 2734 2764 2826 2887 2919 2951 2981	RVEYS Deviation 2.27 2.24 2.06 1.95 1.48 1.22 0.96 0.96 0.91 1.30 1.60 1.58 1.60 1.58 1.60 1.77 1.30 1.20 0.90 0.90	Azimuth 147.80 156.50 158.70 170.70 171.00 170.50 163.70 168.10 177.10 177.90 168.10 177.10 177.90 169.10 199.10 177.10 177.90 169.10 177.10 177.90 189.10 199.10 1	Sample per Sample Desc.	Depth 3103 3133 3165	90% Ss 10° no shows Deviation 1.06 1.02 1.15	Azimuth 174.90 175.60 174.00	DL Angle 0.96 0.14 0.42
MUD SHAPE NO	Deviation Const.	Azimuth. 184.79 189.53 186.87 188.91 180.49 175.88 164.40 182.92 175.88 164.40 182.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 185.70 235.75 203.90 173.03	DL Angle 0,19 0,78 0,17 0,21 0,68 0,26 0,38 0,89 0,12 0,68 1,29 1,88 0,51 0,95 1,04 0,65 0,62 0,40 0,53 0,62 0,40 0,53 0,62 0,41 0,53 0,62 0,41 0,53 0,62 0,41 0,53 0,62 0,40 0,53 0,62 0,40 0,53 0,62 0,40 0,53 0,62 0,51 0,58 0,62	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1857 1720 1751 1762 1813 1344 1875 1906 1935 1997 2028 2060 2091 2120 2183	Deviation (6) 0.69 0.75 0.73 0.84 0.51 0.83 1.20 1.00 0.88 0.84 1.12 1.15 1.15 1.15 1.16 1.18 1.18 1.18 1.19 1.91 1.91 1.99 2.03	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 219.50 201.31 218.50 187.20 196.70 157.60 158.00 158.00 158.00 158.40 164.20 155.20 155.20 155.40 164.20 155.20 148.60 164.20 155.20 148.60 164.20 155.20 148.60 164.20 155.20 148.60 164.20 155.20 155.40 164.20 155.20 148.60 164.20 155.20 148.60 164.20 155.20 148.60 145.10 155.20 145.10 155.20 145.10 155.20 145.10 155.20 145.10 1	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.23 1.04 0.59 0.43 1.06 0.59 0.83 1.04 0.43 1.06 0.59 0.83 0.10 0.83 0.80 0.80 0.80 0.80 0.80 0.80 0.8	Depth 2244 2275 2306 2337 2367 2397 2429 2460 2553 2554 2614 2644 2672 2703 2734 2764 2826 2856 2887 2919 2951 2881 3013 3042	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.96 0.96 1.23 1.10 1.60 1.58 1.82 1.77 1.30 1.60 1.50 1.60 1.50 0.90 0.90 0.80 0.90 0.80 0.96	Azimuth 147.80 156.50 159.70 170.70 171.90 171.70 163.70 1	DL Angle O.66 1.11 O.64 O.13 O.73 O.87 O.84 O.01 O.17 O.80 O.19 O.1	Depth 3103 3133 3165	90% Ss 10° no shows Deviation 1.06 1.02 1.15	Azimuth 174.90 175.60 174.00	DL Angle 0.96 0.14 0.42
MUD SHAPE NO	Deviation Const.	Azimuth. 184.79 189.53 186.87 188.91 180.49 175.88 164.40 182.92 175.88 164.40 182.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 185.70 235.75 203.90 173.03	DL Angle 0,19 0,78 0,17 0,21 0,68 0,26 0,38 0,89 0,12 0,68 1,29 1,88 0,51 0,95 1,04 0,65 0,62 0,40 0,53 0,62 0,40 0,53 0,62 0,41 0,53 0,62 0,41 0,53 0,62 0,41 0,53 0,62 0,40 0,53 0,62 0,40 0,53 0,62 0,40 0,53 0,62 0,51 0,58 0,62	Depth 1407 1438 1468 1499 1532 1563 1595 1628 1638 1720 1751 1906 1935 1967 2028 2080 2091 2120 2152 2133 2213	Deviation (6) 0.69 0.75 0.73 0.84 0.51 0.83 1.20 1.00 0.88 0.84 1.12 1.15 1.15 1.15 1.16 1.18 1.18 1.18 1.19 1.91 1.91 1.99 2.03	Azimuth 190.80 190.50 201.30 215.50 201.30 215.50 206.70 194.00 157.60 157.60 156.00	ON AFTER (t)	Depth 2244 2275 2306 2337 2367 2429 2429 2420 2523 2553 2554 2614 2644 2672 2703 2734 2764 2826 2856 2857 2919 2951 2981 3013 3042 3072	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.95 1.10 1.30 1.60 1.82 1.77 1.30 1.60 1.82 1.77 1.30 1.00 0.90 0.90 0.90 0.90 0.90 0.90 0.9	Azimuth 147.80 156.50 158.70 157.60 163.20 170.70 171.70 171.70 171.80 163.70 163.70 163.70 163.70 168.10 177.10 178.90 184.00 196.10 191.00 205.80 221.40 224.40 224.50 206.00	DL Angle O.66 1.11 O.64 O.13 O.73 O.87 O.84 O.01 O.17 O.80 O.19 O.1	Depth 3103 3133 3165	90% Ss 10° no shows Deviation 1.06 1.02 1.15	Azimuth 174.90 175.60 174.00	DL Angle 0.96 0.14 0.42
Depth 538 664 677 777 777 787 844 876 9936	Deviation Const.	Azimuth. 184.79 189.53 186.87 188.91 180.49 175.88 164.40 182.92 175.88 164.40 182.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 185.70 235.75 203.90 173.03	PL Angle 0.19 0.76 0.17 0.21 0.88 0.26 0.36 0.36 0.38 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.62 1.43 2.30 0.51 0.55 0.62 0.75 0.75 0.75 0.75 0.75 0.75	Depth 1407 1408 1408 1499 1532 1563 1595 1626 1657 1782 1613 1344 1875 1996 1935 2060 2091 2120 2152 2163 2213	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.54 0.93 1.12 1.05 1.18 1.30 1.75 1.70 1.61 1.91 1.88 1.91 1.88 1.94	Azimuth 190.80 190.50 201.30 218.50 201.30 218.50 206.70 194.00 187.20 196.70 202.10 195.76 164.00 146.50 155.00 161.00 158.40 164.20 154.10 155.20 145.10 145.10	ON AFTER (t)	Depth 2244 2275 2306 2337 2367 2399 2429 2452 2523 2553 2554 2614 2644 2672 2703 2734 2764 2826 2856 2857 2919 2951 2981 3013 3042 3072	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.96 0.96 1.23 1.10 1.60 1.58 1.82 1.77 1.30 1.60 1.50 1.60 1.50 0.90 0.90 0.80 0.90 0.80 0.96	Azimuth 147.80 156.50 158.70 157.60 163.20 170.70 171.20 171.70 171.70 171.70 175.40 163.70 1	Sample per Sample Desc.	Depth 3103 3135 3196	90% Ss 10° no shows Deviation 1.06 1.02 1.15	Azimuth 174.90 175.80 174.00 187.30	DL Angle 0.96 0.14 0.42 0.58
MACO Depth 538 566 602 633 664 602 633 664 875 727 757 817 817 817 817 817 817 817 817 817 81	Deviation Const.	Azimuth. 184.79 189.53 186.87 188.91 180.49 175.88 164.40 182.92 175.88 164.40 182.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 185.70 235.75 203.90 173.03	DL Angle 0,19 0,78 0,17 0,21 0,68 0,26 0,38 0,89 0,12 0,68 1,29 1,88 0,51 0,95 1,04 0,65 0,62 0,40 0,53 0,62 0,40 0,53 0,62 0,41 0,53 0,62 0,41 0,53 0,62 0,41 0,53 0,62 0,40 0,53 0,62 0,40 0,53 0,62 0,40 0,53 0,62 0,51 0,58 0,62	Depth 1407 1438 1468 1499 1532 1563 1595 1628 1638 1720 1751 1906 1935 1967 2028 2080 2091 2120 2152 2133 2213	Deviation (6) 0.69 0.75 0.73 0.84 0.51 0.83 1.20 1.00 0.88 0.84 1.12 1.15 1.15 1.15 1.16 1.18 1.18 1.18 1.19 1.91 1.91 1.99 2.03	Azimuth 190.80 190.50 201.30 215.50 201.30 215.50 206.70 194.00 157.60 157.60 156.00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.23 1.04 0.43 1.06 0.59 0.83 1.06 0.59 0.83 1.06 0.59 0.83 1.06 0.59 0.83 0.54 1.59 0.83 0.54 1.59 0.83 0.54 1.59 0.83 0.54 1.59 0.83 0.54 1.59 0.83 0.54 1.59 0.83 0.54 1.59 0.83 0.54 1.59 0.83 0.54 1.59 0.83 0.54 1.59 0.83 0.54 1.59 0.83 0.54 1.59 0.83 0.54 1.59 0.83 0.54 1.59 0.83 0.54 1.59 0.83 0.54 1.59 0.50 0.39 1.15 0.88 0.13 1.52	Depth 2244 2275 2306 2337 2367 2429 2429 2420 2523 2553 2554 2614 2644 2672 2703 2734 2764 2826 2856 2857 2919 2951 2981 3013 3042 3072	Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.96 0.96 1.23 1.10 1.30 1.60 1.58 1.66 1.82 1.77 1.30 1.00 1.00 1.00 1.00 1.00 1.00 1.00	Azimuth 147.80 156.50 158.70 157.60 163.20 170.70 171.20 171.70 171.70 171.70 175.40 163.70 1	DL Angle O.66 1.11 O.64 O.13 O.73 O.87 O.84 O.01 O.17 O.80 O.19 O.1	Depth 3103 3135 3196	90% Ss 10° no shows Deviation 1.06 1.02 1.15	Azimuth 174.90 175.60 174.00	DL Angle 0.98 0.14 0.42 0.58
MACO MACO MACO MACO MACO MACO MACO MACO	### ANNE COST ### GAS DATA (In It COST) GAS DATA (In It COST) GAS DATA (In It COST) GAS DATA (In It COST) 1.03 1.22 1.20 1.25 1.34 1.28 1.34 1.33 1.43 0.84 0.71 0.86 0.50 0.50 1.00 1.01 1.01 0.76 0.27 0.30 0.35 0.44 0.50	Azimuth. 184.79 189.53 186.87 188.91 180.49 180.29 175.88 164.40 182.92 156.82 143.19 130.59 112.85 107.94 109.50 120.10 120.70 132.57 137.30 141.51 185.70 235.75 203.90 173.03 172.10 183.30	DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.38 0.89 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.62 1.44 2.30 0.51 0.55 0.53 0.33	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1720 1751 1772 1813 1344 1375 1996 1935 1997 2028 2091 2120 2152 2183 2213	Deviation 0.469 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.54 1.12 1.15 1.30 1.75 1.70 1.61 1.91 1.88 1.95 1.74 2.93 2.42 ASSUMED EFF (%)	Azimuth. 190.80 190.50 201.30 218.50 190.50 201.30 218.50 190.50 200.70 194.00 187.20 198.70 202.10 179.00 157.60 164.00 155.00	ON AFTER (R) DEVIAT OL Angle 1,35 0,39 0,47 0,83 1,08 1,13 1,08 1,09 0,43 1,09 0,43 1,09 0,55 1,23 1,004 1,59 0,54 1,59 0,59 0,39 1,12 1,05 0,26	Depth 2244 2275 2306 2337 2367 2399 2429 2460 2452 2553 2554 2614 2674 2674 2674 2676 2826	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.96 0.96 1.52 1.10 1.30 1.60 1.50 1.50 1.50 1.00 1.00 1.00 1.00 ING DATA	AFTER UNAYS Azimuth 147.80 156.50 158.70 157.60 163.20 170.70 171.90 171.70 171.90 171.90 171.90 171.90 171.90 171.90 171.90 171.90 171.90 171.90 171.90 171.90 171.90 171.90 171.90 171.90 171.90 171.90 171.90 183.70 183.70 184.90 196.10 191.90 196.10 191.90 205.80 221.40 224.80 225.50 206.00 191.10	Sample per	Depth 3103 3135 3196	Deviation 1.06 1.02 1.15 1.28	Azimuth 174.90 175.60 174.00 167.30	DL Angle 0.96 0.14 0.42 0.58
MOD Ppth 10-30 Ppth 10	### GAS DATA (in the control of the	Azdmuth 184.79 189.53 186.87 188.91 180.49 150.29 175.88 180.40 162.92 156.82 143.19 130.59 112.85 107.94 109.50 126.70 132.57 137.30 141.51 185.70 235.75 203.90 173.03 172.10 183.30	PL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.39 0.12 0.68 1.29 1.80 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.62 1.44 2.30 0.51 0.55 0.28 0.30	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1688 1720 1751 1762 1213 1844 1875 1996	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.84 0.93 1.12 1.05 1.18 1.30 1.75 1.70 1.70 1.91 1.88 1.95 1.74 1.99 2.03 2.42	Azimuth 190.80 190.80 201.30 218.50 201.30 218.50 201.30 194.00 187.20 194.00 187.20 196.70 202.10 197.00 157.60 164.00 146.50 158.00 158.00 161.00 158.00 158.00 158.00 158.00 158.00 158.00 158.00	ON AFTER (t)	Depth 2244 2275 2306 2337 2367 2399 2429 2452 2523 2553 2554 2614 2644 2672 2703 2734 2764 2826 2856 2857 2919 2951 2951 3013 3042 3072	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.95 1.10 1.30 1.60 1.80 1.66 1.82 1.77 1.30 1.00 0.90 0.90 0.90 0.90 0.90 0.90 0.9	Azimuth 147.80 156.50 158.70 157.60 163.20 170.70 171.10 171.90 171.20 170.81 163.70 157.40 163.70 157.40 163.70 157.40 163.70 157.40 163.70 157.40 163.70 159.40 163.70 177.10 178.90 184.00 191.00 205.80 205.50 206.00 191.10	Sample per	Depth 3103 3135 3196	90% Ss 10* no shows Deviation 1.06 1.02 1.15 1.28	Azimuth 174.90 175.60 167.30 ANNA AR VE DC	DL Angle 0.96 0.14 0.42 0.58
MODO MAPS MODO MAPS	### ANNE COST ### GAS DATA (In It COST) GAS DATA (In It COST) GAS DATA (In It COST) GAS DATA (In It COST) 1.03 1.22 1.20 1.25 1.34 1.28 1.34 1.33 1.43 0.84 0.71 0.86 0.50 0.50 1.00 1.01 1.01 0.76 0.27 0.30 0.35 0.44 0.50	Azimuth. 184.79 189.53 186.87 188.91 180.49 180.29 175.88 164.40 182.92 156.82 143.19 130.59 112.85 107.94 109.50 120.10 120.70 132.57 137.30 141.51 185.70 235.75 203.90 173.03 172.10 183.30	DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.38 0.89 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.62 1.44 2.30 0.51 0.55 0.53 0.33	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1720 1751 1772 1813 1344 1375 1996 1935 1997 2028 2091 2120 2152 2183 2213	Deviation 0.469 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.54 1.12 1.15 1.30 1.75 1.70 1.61 1.91 1.88 1.95 1.74 2.93 2.42 ASSUMED EFF (%)	Azimuth. 190.80 190.50 201.30 218.50 190.50 201.30 218.50 190.50 200.70 194.00 187.20 198.70 202.10 179.00 157.60 164.00 155.00	ON AFTER (R) DEVIAT OL Angle 1,35 0,39 0,47 0,83 1,08 1,13 1,08 1,09 0,43 1,09 0,43 1,09 0,55 1,23 1,004 1,59 0,54 1,59 0,59 0,39 1,12 1,05 0,26	Depth 2244 2275 2306 2337 2367 2399 2429 2460 2452 2553 2554 2614 2674 2674 2674 2676 2826	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.96 0.96 1.52 1.10 1.30 1.60 1.50 1.50 1.50 1.00 1.00 1.00 1.00 ING DATA	AFTER UNAYS Azimuth 147.80 156.50 158.70 157.60 163.20 170.70 171.90 171.70 171.90 171.90 171.90 171.90 171.90 171.90 171.90 171.90 171.90 171.90 171.90 171.90 171.90 171.90 171.90 171.90 171.90 171.90 171.90 183.70 183.70 184.90 196.10 191.90 196.10 191.90 205.80 221.40 224.80 225.50 206.00 191.10	Sample per	Depth 3103 3135 3196	Deviation 1.06 1.02 1.15 1.28	Azimuth 174.90 175.60 174.00 167.30	DL Angle 0.96 0.14 0.42 0.58

WELL NAME		
Jensen 1-18 43-	-007-3	30718
LOCATION DATA		
NW NW Sec 16 T-12S	s, R-10E	
FOOTAGES E	GL	KB
	7569	7580

EVERGREEN OPERATING, INC. DAILY DRILLING REPORT

RIG CONTACT IN	FORMATION:
OFFICE TRAILER / FAX:	970 942 7543
CONSULTANT HAND CELL:	303 913 1054
DOGHOUSE:	307 258 7315
PUSHER:	

DATE SPUD DATE	6AM DEPTH
8/31/2004 8/16/2004	3449
REPORT NO.	24 HR FOOTAGE
15	194
DRLG CONTRACTOR	DAYS SINCE SPUD
Elenburg, Rig 12	15
CONSULTANT	AFE# API#
John C. Lamb	43-007-30718

ACTIVITY AT REPORT TIME:

Drilling ahead

Daily cost cum cost AFE costs

\$ 22,489 \$ 414,666 \$ -

СН	RONOLOG	Y OF DAIL	Y OPERATIONS (06:00 - 06:00 HRS)	SLOW	PUMP RA	TE DATA:	The State of the S	STRIN	G WEIGHT INFO	ORMATION:
FROM	то	HOURS		Depth	SPM	Pressure	Eff BHA Wt	Rotating:	Slackoff:	Hoisting:
(hrs)	(hrs)	(hrs)	Activity:	3432	54	325	43,000	109,000	108,000	115,000
06:00	09:30	3.50	Rotate 3255 - 3287			*****				
09:30	12:30	3.00	Slide 3287 - 3302							
12:30	13:15	0.75	Rotate 3302 - 3307							
13:15	13:30	0.25	Service rig							
13:30	22:00	8.50	Rotate 3307 - 3388							
22:00	00:15	2.25	Slide 3388 - 3406							
00:15	06:00	5.75	Rotate 3406 - 3449; ROP slowing below 3420'							
						- · · · · · · · · · · · · · · · · · · ·				

			Delivered casing, a total of 79 joints on location - 3499	.78 length						
	<u></u>									
									REC	FIME
									- 1 Serve One	1 3 2004
									DEA	4
									UEC	1 3 2004
										- 4007
									WY OF OU	
	L								MY WE CHE	GAS & MINING
										(1111.411.47)
TOTAL F	LOUDO	24.00								

	DAILY	CUM
DESC.	(hrs)	(hrs)
Drill	23.75	248.50
Trìp		22.75
Circulate		0.75
Rig Repair		22.75
Rig Service	0.25	4.75
Dev Survey		
NU / ND		8.50
Cement		
Run Casing		
woc		
OH Logging		
Mix Mud		
MI & RU		6,00
RatHole		
Mouse Hole		
Fishing		
Other		0.50
Coring		
Inspect BHA		
Cut drig line		1.25
Wash & Ream		1.25
Drill Cement		6.25
Test BOPE		1.50
woo		
PU/LD BHA		9.25
insp circ equip		3.50
TOTALS	24.00	337.50

			DAILY		CUM	AFE
COST CODE	DESCRIPTION OF DAILY COSTS		(\$)		(\$)	(S)
2030.010	Land, Legal, Title, Survey, Arch, Damages, Permits, Signs					
2030.031	Dirtwork, Road, Location, Pits, Liner			<u> </u>		
2030.019	Contract Drilling 9480 / day 392.5 / h cond 5071 26,000 mob sfc 36791	\$	9,480	\$	207,152	
2032.001	Water	\$	243	\$	3,510	
2032.013	Drill Bits, Stabilizers, Reamers			\$	34,000	
2031.046	Cementing and Services			\$	5,000	
2030.053	Coring and Analysis					
2030.052	Logging			<u> </u>		
2030,054	Mud Logging 2 day cum	\$	1,500	\$	1,500	
2030.037	Rental Equipment	\$	1,501	\$	26,153	
2030.028	Transportation			\$	8,362	
2032.004	Mud and Chemicals	\$	2,691	\$	2,330	
	Directional Services, Mud Motors	\$	6,274	\$	89,008	
	Intermediate casing	_				
2030.035	Contract Labor			\$	2,920	
2030.022	Engineering / Supervision	\$	800	\$	12,000	
2030.099	Intangible Miscellaneous and Contingencies					
2040.001	Surface Casing	\perp		\$	17,790	
2040.004	Production Casing					
1011.000	Float Equipment, Shoes, Centralizers					
1041.000	Wellhead Equipment			\$	4,941	
1073.000	Bottom Hole Pump / Gas Lift / Other					
1104.000	Drivehead, Engine / Motor and Hydraulic Pump / Electric Unit					
2040.052 / 2040.055	Valves and Fittings, Small / Large					
2040.067	Other Surface Equipment					
2040.099	Tangible Miscellaneous and Contingencies					
	TOTAL COSTS	s	22,489	5	414,666	

	15	Date:	08/31/04 Well Na	me:	D/	AILY DR	ILLING		RT						Page 2
			77 011 740					T RECOR			γ				
BIT	BYT		144			DEPTH	DEPTH	POOTAGE	CUM BIT HOURS	ROP	WOB	RPM	TORQUE		T GRADING
NO.	SIZE		****	SERIAL NO	JETS (32/32/32)	IN (ft)	OUT (ft)	(A)	(hrs)	(fUhr)	(F's)	MTR/TBL	(ft - lbs)	In Out Dull Loc	Seals Gge Dull Oth
(*)	(ln) 12 1/4	Security	XL18N	754840	14 / 14 / 14 / 1		1,799	1,305	102.75	12.7	36 - 43	45 / 60	2100 - 2900	6 7 WT ALL	. EFE 1/8 CI
2	12 1/4	Security	XL43	10408516		1,799	2,698	899	83.25	10.8	35 - 40	45 / 45-70			
3	12 1/4	Smith	F4	MT6085	18 / 18 / 18	2,698	3,449	751	72.00	10.4	35 - 40	45 / 60	1600 - 2550		
				ļ —		ļ .	L	0		#DIV/0!					
				 		 		0		#DIV/0!					
			<u> </u>			1		0		#DIV/0!					
сом	MENTS	L													
REN	AL EQUIP	MENT								CASING	ATA				
RENTAL	DAILY	CUM							EXTERNAL	INTERNAL	CAPACITY	LENGTH	TOP SET AT	BOTTOM SET AT	
ITEM	COSTS	COSTS		SIZE	WEIGHT	GRADE	CONN	DRIFTID	COLLAPSE (psl)	(psi)	(bHe/ft)	(R)	(N)	(f(KB)	
	(5) \$ 315	(\$) \$ 5,085		30*	NA	NA	5,555		(par)	W-7	1	40.00	0.00	40.00	
LMing Qtrs ac Tank	\$ 45	\$ 665		13 3/8"	54.5	J55	ST&C	12.459	1,130	2,730	0.15450	500.00	2.00	498.00	
rklift	\$ 60	\$ 900													
rtajohn	\$ 20	\$ 300							L	L	J	L.,			
id Trailer	\$ 50 \$ 375	\$ 750 \$ 6,625					8.5.7	В	оттомно	LE ASSE	MBLY		ale 180 a		and the second
ud Cleaner	\$ 375 \$ 100	\$ 1,500	- 1.535.55					T T		MAXIMUM	MINIMUM				
iconiler	\$ 90	\$ 1,260				1.36		THRE	AD SIZE	O.D.	1.0.	LENGTH		HRS SINCE	
mud cin	1	\$ 375	DE	CRIPTION OF	ВНА	PROV	ADER	вох	PIN	(in)	(hn)	(fL)	HOURS RUN	INSPECTION	den si bare i i i
li collars	\$ 196	\$ 5,193		Bit		Sn			6 5/8 R	12.250	ļ	1.25	├		ļ
ock Sub	\$ 250	\$ 3,500	7/8 Lobe 4 3		g Mud Motor	Black		6 5/8 R	6 5/8 R	8.000	2.000	24.13	 		
ner	ļ	i	<u> </u>	Float Sub	Cub		Di	6 5/8 R 6 5/8 R	6 5/8 R 6 5/8 R	8.000	3.000 2.688	3.02 9.43			
	 			onel Drill Co		Sp S		6 5/8 R	6 5/8 R	8.000	3.250	30.58			
er .	 			Off Sub & C		s		6 5/8R	6 5/8 R	7.750	3.750	8.94			
ø				хо		s		6 5/8 H90	6 5/8 R	8.000	3.250	2.35	\Box		
ner			7 -	7 3/4" Drill C	ollars	ri		6 5/8 H90	6 5/8 H90	7.750	2.250	340.02			
)er	ļ			XO XO	N-11	s		4 1/2 XH	6 5/8 H90	7.750	2.625	2.35 309.53			
TOTALS	\$ 1,501	\$ 26,153	10 -	6 1/2 Drill C	ollars	ri		4 1/2 XH	4 1/2 XH	6.500	2.250	308.53			
Quiet.	100					PROF.		G MUD R							<u> </u>
SAMPLE		MUD	PUNEL			GEL	FILTRATE	CALCIUM	CAKE THICKNESS	SOLIDS	SAND	ρΗ	CHLORIDES	ALKALINITY	LCM
DEPTH	TIME (hh:mm)	WT.	VISCOSITY (sec/qt)	PV/YP	(%)	STRENGTH (Ib/100 A2)	API (ml/30 mln)	(ppm)	(/32 in)	(% vol)	(% vol)	Pn	(ppm)	Pf/Mf	le/gal
3,280	09:00	(ppg) 9.30	40	11 / 12	2.20	5 / 10	15.0	20	2	6.0	1/4	9.5	14,000	.7 / 4	
3,350	18:00	9.30	39	10 / 12	2.20	5 / 10	16.0	20	2	6.0	1/4	9.5	14,000	.8/4.0	
	L							<u> </u>							
	A PAPER ST.	Parigital 1	1 3 4 4 4 4 A 1 C 4			DA	ILY MUD	COST & I	NVENTOR	Y					
Tarib i	il is service	1,148,617	1 194 4 199 6							PAC-R	PHPA	ÇEDAR	TRUCKING		TOTAL COSTS
		1. 400	BARITE (sx)	QUICK GEL (sx)	CAUSTIC (ex.)	LIME (sx)	SODA ASH	UNIDPULL (sx)	SOLKWICK (=x)	(SX)	(94)	(SX)	(5)		(5)
at cost															
FARTING INV	ENTORY		120												
MENTORY R											 				
SED LAST 24											 				
NIDING INVEN								-			 				2,6
	MULATIVE COS	,													20,6
						<u> </u>					<u> </u>	l			23,30
UMULATIVE	MUD COST								EDORT		dina				
	MUD COST			:4:		Sarah (Sarah	MUD LC	GGER R		a The rode					
UMULATIVE	GAS DATA (In U		SHOW INTE			OF PENETRATI	ON		SHOW GAS DA		Formation 1	lons:	Price River	2100' Castlega	te 3090'
MULATIVE MUD BACK	GAS DATA (In C	TRIP	FROM	TO	BEFORE	DURING	ON AFTER	BEFORE	SHOW GAS DA DURING	AFTER	Formation 1	Tops:		2100' Castlega 3420'	ite 3090'
MULATIVE	GAS DATA (In U						ON		SHOW GAS DA		Formation 1		Price River Blackhawk 95% Ss; 5%	3420'	ite 3090'
MULATIVE I MUD BACK GROUND	GAS DATA (In C	TRIP	FROM	TO	BEFORE	DURING	ON AFTER	BEFORE	SHOW GAS DA DURING	AFTER		centages:	Blackhawk 95% Ss; 5% Ss trnsl fg o	3420' Sh occ m gy fri	ile 3090*
MULATIVE I MUD BACK GROUND	GAS DATA (In C	TRIP	FROM	TO	BEFORE	DURING	ON AFTER	BEFORE	SHOW GAS DA DURING	AFTER	Sample per	centages:	Blackhawk 95% Ss; 5%	3420' Sh occ m gy fri	ste 3090'
MULATIVE I MUD BACK GROUND	GAS DATA (In C	TRIP	FROM	TO	BEFORE	DURING	ON AFTER	BEFORE	SHOW GAS DA DURING	AFTER	Sample per	centages:	Blackhawk 95% Ss; 5% Ss trnsl fg o	3420' Sh occ m gy fri	ite 3090'
MULATIVE I MUD BACK GROUND	GAS DATA (In C	TRIP	FROM	TO	BEFORE	DURING	ON AFTER (R)	BEFORE	SHOW GAS DA DURING UNITS	AFTER	Sample per	centages:	Blackhawk 95% Ss; 5% Ss trnsl fg o	3420' Sh occ m gy fri	ite 3090'
MULATIVE MUE BACK GROUND 9 - 10	GAS DATA (In C	TRIP	FROM	TO	BEFORE	DURING	ON AFTER (R)	BEFORE	SHOW GAS DA DURING UNITS	AFTER UNITS	Sample per	centages:	Blackhawk 95% Ss; 5% Ss trnsl fg o	3420' i Sh occ m gy fri k gybn carb Azimuth	DL Angle
MULATIVE I MUD BACK GROUND	GAS DATA (In) CONN GAS	Azimuth	FROM (A) DL Angle 0.19	Depth 1407	Deviation 0.69	Azimuth 190.80	DEVIAT DL Angle 1.35	BEFORE UNITS ION SUI Depth 2244	SHOW GAS DA DURING UNITS RVEYS Deviation 2.27	AFTER UNITS Azimuth 147.80	Sample per Sample Desc DL Angle 0.66	centages: ription: Depth 3103	Blackhawk 95% Ss; 5% Ss trnsl fg Sh dk gy-di	3420' i Sh occ m gy fri k gybn carb Azimuth 174.90	DL Angle
MUCATIVE MUC BACK GROUND 9 - 10 Depth 538 566	GAS DATA (In () CONN GAS Deviation 1,03 1,22	Asimuth 184.79 189.53	PL Angle 0.19 0.76	Depth 1407 1438	Deviation 0.69 0.75	Azimuth 190.80 190.50	DEVIAT DL Angle 1.35 0.39	Depth 2244 2275	DUPLING UNITS RVEYS Deviation 2.27 2.24	Azimuth 147.80 156.50	Sample per Sample Desc DL Angle 0.66	Centages: ription: Depth 3103 3133	Blackhawk 95% Ss; 5% Ss trnsl fg o Sh dk gy-di Deviation 1.08	3420' i Sh occ m gy fri c gybn carb Azimuth 174.90 175.60	DL Angle 0.96 0.14
MULATIVE MUC BACK BROUND 9 - 10 Depth 538 566 602	GAS DATA (in to CONN) GAS Deviation 1.03 1.22 1.20	Azimuth 184.79 189.53 186.87	PL Angle 0.19 0.76 0.17	Depth 1407 1438 1468	Deviation 0.69 0.75	Azimuth 190.80 190.50 201.30	DEVIAT DL Angle 1.35 0.39 0.47	ION SUI Depth 2244 2275 2306	DEVIATION 2.27 2.24 2.06	AFTER UNITS Azimuth 147.80 156.50 158.70	Sample per Sample Desc DL Angle 0.66 1.11 0.64	Depth 3103 3133 3165	Blackhawk 95% Ss; 5% Ss trnsl fg o Sh dk gy-di	3420' i Sh occ m gy fri k gybn carb Azimuth 174.90 175.60 174.00	DL Angle 0.96 0.14 0.42
MULATIVE MULATIVE BACK BROUND 9 - 10 Depth 538 566 602 633	CAS DATA (In 1) CONN GAS Deviation 1.03 1.22 1.20 1.25	Azimuth 184.79 189.53 186.87 188.91	PL Angle 0.19 0.76	Depth 1407 1438 1468 1499	Deviation 0.69 0.75 0.73	Azimuth 190.80 190.50 201.30 218.50	DEVIAT DL Angle 1.35 0.39 0.47 0.83	Depth 2244 2275	DUPLING UNITS RVEYS Deviation 2.27 2.24	Azimuth 147.80 156.50	Sample per Sample Desc DL Angle 0.66	Centages: ription: Depth 3103 3133	Blackhawk 95% Ss; 5% Ss trnsl fg o Sh dk gy-di Deviation 1.08	3420' i Sh occ m gy fri c gybn carb Azimuth 174.90 175.60	DL Angle 0.96 0.14
MULATIVE MUE BACK BROUND 9 - 10 Depth 538 666 602 633 664	GAS DATA (n / CONN GAS) Deviation 1.03 1.22 1.20 1.34	Azimuth 184.79 199.53 186.87 180.49	DL Angle 0.19 0.76 0.17 0.21	Depth 1407 1438 1468	Deviation 0.69 0.75	Azimuth 190.80 190.50 201.30	DEVIAT DL Angle 1.35 0.39 0.47	BEFORE UNITS UNITS	RVEYS Deviation 2.27 2.24 2.06 2.05	Azimuth 147.80 156.50 158.70 157.60	Sample per Sample Desc	Depth 3103 3165 3196	Blackhawk 95% Ss; 5% Ss trnsl fg o Sh dk gy-di Deviation 1.02 1.15 1.26	3420' Sh occ m gy fri k gybn carb Azimuth 174.90 175.60 174.00	DL Angle 0.96 0.14 0.42 0.58
MULATIVE MULATIVE BACK BROUND 9 - 10 Depth 538 566 602 633	CAS DATA (In 1) CONN GAS Deviation 1.03 1.22 1.20 1.25	Azimuth 184.79 189.53 186.87 188.91	DL Angle 0.19 0.76 0.17 0.21 0.68 0.25 0.36	Depth 1407 1438 1468 1499 1532	Deviation 0.69 0.73 0.84 0.51	Azimuth 190.80 190.50 201.30 218.50 208.70	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08	Depth 2244 2275 2307 2367	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95	Azimuth 147.80 156.50 157.60 163.70 170.70	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87	Depth 3103 3135 3165 3226 3257 3288	Blackhawk 95% Ss; 5% Ss trnsl fg Sh dk gy-di Deviation 1.08 1.02 1.15 1.26 1.45 1.38	3420' Sh open m gy fri c gybn carb Azimuth 174.90 175.60 174.00 167.30 189.60 155.00	DL Angle 0.98 0.14 0.42 0.58 0.68 0.40 0.82
MULATIVE BACK BROUND 9 - 10 Depth 538 566 602 633 664 695 727 757	GAS DATA (In CONN GAS DATA (IN CONN GAS DATA (IN	Asimuth 184.79 189.53 186.87 180.49 180.29 175.88 194.40	DL Angle 0.19 0.76 0.17 0.21 0.65 0.26 0.36 0.36	Depth 1407 1438 1468 1499 1532 1595 1626	Deviation 0.75 0.73 0.84 0.51 0.83 0.85 0.61	Azimuth 190.80 190.50 201.30 218.50 208.70 194.00 187.20 196.70	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43	Depth 2244 2275 2307 2367 2399 2460	RVEYS Deviation 2.27 2.24 2.05 1.95 1.48 1.22 0.96	Azimuth 147.80 158.50 157.60 163.20 170.70 170.10	Sample per Sample Desc DL Angle 0.66 0.13 0.73 1.62 0.87 0.84	Depth 3103 3165 3196 3226 3257 3228 3320	Blackhawk 95% Ss; 5% Ss trnsl fg Sh dk gy-di Deviation 1.06 1.02 1.15 1.26 1.45 1.38 1.40 1.40	3420' Sh open m gy fri k gybn carb Asimuth 174.90 175.60 174.00 167.30 169.60 155.00 155.00	DL Angle 0.96 0.14 0.42 0.55 0.66 0.40 0.82 0.31
BACK 3ROUND 9 - 10 Depth 538 566 602 633 664 695 727 787	GAS DATA (In the Connection of	Asimuth 144.79 180.29 175.88 164.40 162.92	DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.38 0.089	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657	Deviation 0.69 0.75 0.73 0.84 0.85 0.85 0.81 1.20	Azimuth 190.80 190.50 201.30 215.50 209.70 194.00 187.20 196.70 202.10	DEVIAT DL Angle 1.35 0.39 0.47 1.08 1.13 0.29 0.43 1.29	Depth 2244 2275 23067 2399 2449 2460 2492	RVEYS Peviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.96 0.96	Azimuth 147.80 156.50 157.70 170.70 171.70 171.90	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87 0.84	Depth 3103 3133 3165 3196 3226 3257 3288 3320 3350	Blackhawk 95% Ss; 5% Ss trist [g : Sh dk gy-di	3420' Sh Occ m gy fri Gybn carb Azimuth 174.90 175.60 174.00 167.30 169.60 155.00 159.00 159.00	DL Angle 0.98 0.14 0.42 0.53 0.66 0.40 0.82 0.31
MULATIVE BACK BROUND 9 - 10 Depth 538 566 602 633 664 695 727 757 787 817	GAS DATA (n / CONN GAS CAS CAS CAS CAS CAS CAS CAS CAS CAS C	Azimuth 184.79 189.53 186.87 188.91 180.29 175.88 164.40 162.92 165.82	DL Angle 0.19 0.76 0.17 0.21 0.65 0.36 0.38 0.89 0.12 0.63	Depth 1407 1438 1468 1499 1532 1595 1626 1657 1688	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 196.70 202.10	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65	Depth 2244 237 2399 2429 2460 2523	RVEYS Devlation 2.27 2.24 2.06 2.05 1.95 1.22 0.96 0.96 0.91	Azimuth 147.80 158.50 158.70 157.60 163.20 170.70 170.10 171.70 171.90 171.20	Sample pen Sample Desc	Depth 3103 3165 3196 3226 3257 3228 3320	Blackhawk 95% Ss; 5% Ss trnsl fg Sh dk gy-di Deviation 1.06 1.02 1.15 1.26 1.45 1.38 1.40 1.40	3420' Sh open m gy fri k gybn carb Asimuth 174.90 175.60 174.00 167.30 169.60 155.00 155.00	DL Angle 0.96 0.14 0.42 0.55 0.66 0.40 0.82 0.31
MULATIVE BACK BROUND 9 - 10 Depth 536 602 633 664 6727 757 7817 844	GAS DATA (In CONN GAS CAS CAS CAS CAS CAS CAS CAS CAS CAS C	Asimuth 184.79 189.53 186.87 180.49 100.29 150.29 154.40 162.92 156.82 143.19	DL Angle 0.19 0.76 0.17 0.21 0.65 0.26 0.36 0.49 0.12 0.65 1.29	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1688 1720	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.61 1.20 1.00 0.88	Azimuth 190.80 190.50 201.30 206.70 194.00 187.70 202.10 196.70 202.10	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23	Depth 2244 2275 2306 7 2399 2449 2440 2492 2523 2553	RVEYS Peviation 2.27 2.24 2.06 1.95 1.48 0.98 0.98 0.99 1.23	Azimuth 147.80 156.50 155.70 163.20 170.10 171.70 171.90 171.20 170.90	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.84 0.01	Depth 3103 3133 3165 3196 3226 3257 3288 3320 3350	Blackhawk 95% Ss; 5% Ss trist [g : Sh dk gy-di	3420' Sh Occ m gy fri Gybn carb Azimuth 174.90 175.60 174.00 167.30 169.60 155.00 159.00 159.00	DL Angle 0.98 0.14 0.42 0.53 0.66 0.40 0.82 0.31
MULATIVE BACK BROUND 9 - 10 Depth 538 566 602 633 664 695 727 757 787 817	GAS DATA (n / CONN GAS CAS CAS CAS CAS CAS CAS CAS CAS CAS C	Azimuth 184.79 189.53 186.87 188.91 180.29 175.88 164.40 162.92 165.82	DL Angle 0.19 0.76 0.17 0.21 0.65 0.36 0.38 0.89 0.12 0.63	Depth 1407 1438 1468 1499 1532 1595 1626 1657 1688	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 196.70 202.10	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65	Depth 2244 237 2399 2429 2460 2523	RVEYS Devlation 2.27 2.24 2.06 2.05 1.95 1.22 0.96 0.96 0.91	Azimuth 147.80 158.50 158.70 157.60 163.20 170.70 170.10 171.70 171.90 171.20	Sample pen Sample Desc	Depth 3103 3133 3165 3196 3226 3257 3288 3320 3350	Blackhawk 95% Ss; 5% Ss trist [g : Sh dk gy-di	3420' Sh Occ m gy fri Gybn carb Azimuth 174.90 175.60 174.00 167.30 169.60 155.00 159.00 159.00	DL Angle 0.98 0.14 0.42 0.53 0.66 0.40 0.82 0.31
MULATIVE BACK BACK BACK 9 - 10 Depth 538 566 602 663 664 695 727 787 787 314 878	GAS DATA (n t) CONN GAS Deviation 1.03 1.22 1.20 1.25 1.34 1.26 1.32 1.34 1.33 1.44 1.43 0.84	Azimuth 144.79 189.53 186.87 183.91 180.29 175.83 164.40 162.92 156.82 143.19 137.08	DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.68 1.29	Depth 1407 1438 1468 1498 1532 1563 1595 1626 1657 1688 1720 1751	Deviation 0.69 0.75 0.73 0.84 0.85 0.81 1.20 1.00 0.88 0.84	Azimuth 190.80 190.50 201.30 213.50 209.70 194.00 187.20 196.70 202.10 179.00 179.00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04	Depth 2244 2275 2306 2397 2429 2449 2553 2554	RVEYS	Azimuth 147.80 158.70 158.70 170.70 170.10 171.90 171.20 170.80	DL Angle O.66 O.67 O.67 O.67 O.62 O.63 O.63 O.63 O.64 O.64 O.64 O.64 O.65 O.6	Depth 3103 3133 3165 3196 3226 3257 3288 3320 3350	Blackhawk 95% Ss; 5% Ss trist [g : Sh dk gy-di	3420' Sh Occ m gy fri Gybn carb Azimuth 174.90 175.60 174.00 167.30 169.60 155.00 159.00 159.00	DL Angle 0.98 0.14 0.42 0.53 0.66 0.40 0.82 0.31
BACK BROWN 9 - 10 Depth 538 660 660 663 664 665 757 757 757 817 844 846 990 9936 9971	GAS DATA (n t) CONN GAS Deviation 1.03 1.22 1.20 1.25 1.34 1.26 1.32 1.34 1.33 1.44 0.71 0.88 0.50	Azimuth. 184.79 189.53 186.87 180.49 180.29 175.88 164.40 162.92 156.82 143.19 137.08 130.59 112.85	DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.49 0.12 0.68 0.51 0.99 1.04	Depth 1407 1438 1468 1495 1532 1563 1595 1626 1657 1688 1720 1751 1770 1770 1782	Deviation 0.69 0.75 0.73 0.84 0.51 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05	Azimuth 190.80 190.50 201.30 218.50 209.70 194.00 187.20 202.10 202.10 196.70 196.70 196.70 196.70 197.00 157.60 148.00 148.00 148.00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.65 1.23 1.04 0.43 1.04 0.43 1.04 0.43 1.04 0.43	Depth 2244 2275 2306 2397 2429 2429 2553 2584 2614 2672	RVEYS Deviation 2.27 2.24 2.06 1.95 1.48 1.22 0.98 0.98 0.91 1.23 1.10 1.30 1.50	Azimuth 147.80 156.50 158.70 170.70 171.70 171.20 171.20 170.60 163.70 157.40 163.70 163.70	DL Angle O.66 1.11 O.64 O.13 O.73 1.62 O.87 O.84 O.11 O.17 O.62 O.80 O.12 O.80 O.12 O.80 O.13 O.13 O.14 O.15 O.84 O.15 O.8	Depth 3103 3133 3165 3196 3226 3257 3288 3320 3350	Blackhawk 95% Ss; 5% Ss trist [g : Sh dk gy-di	3420' Sh Occ m gy fri Gybn carb Azimuth 174.90 175.60 174.00 167.30 169.60 155.00 159.00 159.00	DL Angle 0.98 0.14 0.42 0.53 0.66 0.40 0.82 0.31
BACK BROUND 9 - 10 Dapth 538 660 633 664 633 664 637 777 787 817 844 907 997 997 10034	GAS DATA (n / CONN GAS CAS CAS CAS CAS CAS CAS CAS CAS CAS C	Azimuth 104.79 199.53 186.87 185.91 180.49 180.29 175.83 164.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94	DL Angle 0.19 0.76 0.17 0.21 0.65 0.28 0.36 0.89 0.12 0.65 1.29 1.88 0.51 0.95	Depth 1407 1438 1468 1499 1532 1563 1595 1656 1657 1688 1720 1751 1782 1813 1844 1875	Deviation 0.69 0.75 0.73 0.84 0.83 0.85 0.61 1.20 1.00 0.88 0.84 0.93 1.12 1.05	Azimuth 190.80 190.50 201.30 211.50 206.70 196.70 202.10 179.00 157.60 164.00 145.00	DE VIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 0.43 1.06 0.59 0.63	Depth 2244 2275 2396 2499 2429 2523 2553 2564 2614 2644 2872 2703	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.22 0.96 0.98 0.98 1.10 1.30 1.50 1.60	Azimuth 147.80 156.50 158.70 157.60 163.20 170.70 171.90 171.90 171.90 157.40 165.40 165.40 163.70 163.10	Sample pen Sample Desc	Depth 3103 3133 3165 3196 3226 3257 3288 3320 3350	Blackhawk 95% Ss; 5% Ss trist [g : Sh dk gy-di	3420' Sh Occ m gy fri Gybn carb Azimuth 174.90 175.60 174.00 167.30 169.60 155.00 159.00 159.00	DL Angle 0.98 0.14 0.42 0.53 0.66 0.40 0.82 0.31
BACK BROWN 9 - 10 Depth 538 566 602 633 664 727 757 757 757 344 376 996 997 997 1034 1066	GAS DATA (n / CONN GAS	Azimuth 184.79 189.53 186.87 189.53 186.87 180.49 180.29 175.88 164.40 162.92 143.19 137.08 130.59 112.85 107.94 109.50 120.10	DL Angle 0.19 0.76 0.17 0.21 0.68 0.28 0.36 0.89 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1688 1720 1751 1782 1813 1844 1844 1806	Deviation 0.89 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.13	Azimuth 190.80 190.50 201.30 216.50 206.70 194.00 187.20 196.70 202.11 179.00 157.60 146.00 146.00 146.50 146.50	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.23 1.04 0.43 1.29 0.65 1.23 1.04 0.43 1.06 0.59 0.83	Depth 2244 2275 2306 2492 2460 2492 2523 2553 2584 2614 2644 2672 2703 2734	RVEYS Deviation 2.27 2.24 2.06 1.95 1.48 2.09 1.22 0.96 1.23 1.10 1.60 1.55 1.66 1.62	Azimuth 147.80 156.50 155.70 157.60 163.20 170.10 171.70 171.90 171.20 170.80 163.70 165.40 165.40 165.40 165.10 177.10	Sample pen Sample Desc	Depth 3103 3133 3165 3196 3226 3257 3288 3320 3350	Blackhawk 95% Ss; 5% Ss trist [g : Sh dk gy-di	3420' Sh Occ m gy fri Gybn carb Azimuth 174.90 175.60 174.00 167.30 169.60 155.00 159.00 159.00	DL Angle 0.96 0.14 0.42 0.53 0.66 0.40 0.82 0.31
BOUND 9 - 10 Depth 538 666 602 638 634 695 727 787 817 834 834 839 919 919 919 919 919 919 919 919 919 9	Deviation 1.03 1.22 1.20 1.25 1.34 1.26 1.33 1.40 1.43 0.84 0.71 0.88 0.50 0.91	Asimuth 184.79 189.53 186.87 180.49 180.29 175.88 194.40 162.92 195.62 143.19 137.08 130.59 112.85 107.94 109.50 120.10 120.10 120.10	DL Angle 0.19 0.76 0.17 0.21 0.65 0.28 0.36 0.89 0.12 0.65 1.29 1.88 0.51 0.95	Depth 1407 1438 1468 1532 1563 1595 1626 1657 1688 1720 1751 1782 1813 1844 1875 1906 1935	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.18 1.30	Azimuth 190.80 190.50 201.30 218.50 187.70 202.10 196.70 196.70 196.70 196.70 196.70 196.70 157.60 164.00 155.00 156.00 155.00 155.00 155.00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 0.43 1.09 0.50 0.59 0.53	Depth 2244 2275 2306 2397 2429 2420 2452 2553 2584 2614 2672 2703 2734 2764	RVEYS Deviation 2.27 2.24 2.06 1.95 1.48 1.22 0.96 0.98 0.91 1.23 1.10 1.30 1.58 1.66 1.62 1.77	Azimuth 147.80 156.50 158.70 157.60 163.20 170.70 171.90 171.90 171.90 157.40 165.40 165.40 163.70 163.10	Sample pen Sample Desc	Depth 3103 3133 3165 3196 3226 3257 3288 3320 3350	Blackhawk 95% Ss; 5% Ss trist [g : Sh dk gy-di	3420' Sh Occ m gy fri Gybn carb Azimuth 174.90 175.60 174.00 167.30 169.60 155.00 159.00 159.00	DL Angle 0.96 0.14 0.42 0.53 0.66 0.40 0.82 0.31
BACK BROWN 9 - 10 Depth 538 566 602 633 664 727 757 757 757 344 376 996 997 997 1034 1066	GAS DATA (n / CONN GAS	Azimuth 184.79 189.53 186.87 189.53 186.87 180.49 180.29 175.88 164.40 162.92 143.19 137.08 130.59 112.85 107.94 109.50 120.10	DL Angle 0.19 0.76 0.17 0.21 0.68 0.25 0.36 0.29 1.12 0.68 0.51 1.29 1.88 0.51 0.95 1.04 0.65 0.65 0.65 0.65 0.75 0.75 0.75 0.75 0.75 0.75 0.75 0.7	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1688 1720 1751 1782 1813 1844 1844 1806	Deviation 0.89 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.13	Azimuth 190.80 190.50 201.30 216.50 206.70 194.00 187.20 196.70 202.11 179.00 157.60 146.00 146.00 146.50 146.50	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.23 1.04 0.43 1.29 0.65 1.23 1.04 0.43 1.06 0.59 0.83	Depth 2244 2275 2306 2492 2460 2492 2523 2553 2584 2614 2644 2672 2703 2734	RVEYS Deviation 2.27 2.24 2.06 1.95 1.48 2.09 1.22 0.96 1.23 1.10 1.60 1.55 1.66 1.62	Azimuth 147.80 156.50 158.70 170.70 171.70 171.90 171.20 170.63.70 155.40 163.70 163.70 163.70 170.70	DL Angle 0.66 1.51 0.73 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.80 1.20 0.18 0.48 1.02 0.25 0.2	Depth 3103 3133 3165 3196 3226 3257 3288 3320 3350	Blackhawk 95% Ss; 5% Ss trist [g : Sh dk gy-di	3420' Sh Occ m gy fri Gybn carb Azimuth 174.90 175.60 174.00 167.30 169.60 155.00 159.00 159.00	DL Angle 0.96 0.14 0.42 0.53 0.66 0.40 0.82 0.31
BACK GROUND 9 - 10 Dapth 538 602 633 664 695 727 757 757 817 844 846 997 1004 1004 1004 1004 1004 1004 1004 1105 1105	Deviation 1.03 1.22 1.20 1.34 1.25 1.34 1.32 1.34 1.36 1.30 1.43 0.84 0.71 0.86 0.50 0.91 1.00 1.04 1.18 1.19 1.01	Asimuth 184.79 189.53 186.87 183.91 180.49 180.29 175.88 184.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51	DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.38 0.12 0.63 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.53	Depth 1407 1438 1468 1468 1532 1563 1595 1626 1657 1638 1720 1751 1782 1813 1844 1875 1906 1935 1967 1997 2028	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.18 1.30 1.75 1.70 1.61	Azimuth 190.80 190.50 201.30 218.50 194.00 187.20 196.70 196.70 196.70 196.70 157.60 186.00 148.50 155.00 156.00 156.00 151.00 158.00 164.20 158.00 164.20 158.00 164.20 158.00 164.20 158.00 164.20 158.00 164.20 158.00 164.20 158.00 164.20 158.00 164.20 158.00 164.20 158.00 164.20 164.20 164.20 164.20 164.20 164.20 164.20 164.20 164.20 164.20 164.20 164.20 164.20 164.20 169.00 165.00 1	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.43 1.29 0.43 1.29 0.43 1.29 0.43 1.29 0.43 1.29 0.43 1.29 0.43 1.29 0.43 1.29 0.43 1.29 0.43 1.29 0.43 1.29 0.43 1.29 0.43 1.29 0.43 1.29 0.43 1.29 0.43 1.29 0.43 1.29 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.5	Depth 2244 2275 2306 2397 2429 2460 2492 2553 2584 2614 2672 2703 2734 2764 2826 2856 2887	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.96 0.98 0.99 1.13 1.10 1.30 1.50 1.66 1.52 1.77 1.30 1.20 0.90	Azimuth 147.60 155.50 158.70 177.70 171.90 163.70 163.70 163.70 177.90 163.70 177.90 163.70 177.90 163.70 1	DL Angle O.66 1.91 O.67 O.64 O.13 O.73 O.62 O.60 O.17 O.62 O.60 O.18 O.60 O.18 O.60 O.18 O.60 O.18 O.60 O.79 O.60 O.79 O.60 O.79 O.60 O.79 O.60 O.79 O.60 O.79 O.60 O.79 O.60 O.79 O.60 O.79 O.60 O.79 O.60 O.79 O.60 O.79 O.60 O.70 O.60 O.70 O.60 O.7	Depth 3103 3133 3165 3196 3226 3257 3288 3320 3350	Blackhawk 95% Ss; 5% Ss trist [g : Sh dk gy-di	3420' Sh Occ m gy fri Gybn carb Azimuth 174.90 175.60 174.00 167.30 169.60 155.00 159.00 159.00	DL Angle 0.96 0.14 0.42 0.53 0.66 0.40 0.82 0.31
MAULATIVE BACK GROUND 9 - 10 Dapth 538 660 633 664 677 777 777 817 844 907 936 907 1034 1066 1097 1128 1191 1121	GAS DATA (n / CONN GAS CAS CAS CAS CAS CAS CAS CAS CAS CAS C	Asimuth 104.79 139.53 186.87 185.91 180.29 175.88 164.40 162.92 156.82 143.19 137.08 130.59 112.85 120.10 120.70 132.57 137.30 141.51	DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.62	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1688 1720 1751 1782 1813 1844 1875 1906 1935 1967 1997 2028 2060	Deviation 0.69 0.75 0.73 0.84 0.85 0.85 1.20 1.00 0.88 0.93 1.12 1.05 1.18 1.30 1.75 1.76 1.70 1.61	Azimuth 190.80 190.50 201.30 218.50 209.70 194.00 187.20 196.70 202.10 196.70 164.00 146.50 152.00 161.00 156.40 156.40 161.00	DE VIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 0.43 1.06 0.43 1.09 0.43 1.09 0.43 1.09 0.65 1.23 1.09 0.43 1.09 0.43 1.09 0.65 1.23 1.09 0.43 1.09 0.65 1.23 1.01 1.01 1.05	Depth 2244 2275 2306 2337 2367 2399 2429 2452 2523 2553 2584 2614 2644 2872 2703 2734 2734 2734 2734 2734 2734 2734 273	RVEYS Devlation 2.27 2.24 2.06 2.05 1.95 1.45 1.22 0.98 0.98 0.91 1.23 1.10 1.30 1.60 1.60 1.82 1.77 1.30 1.20 0.90	Azimuth 147.80 158.70 158.70 157.60 163.20 170.70 171.90 171.20 171.80 163.20 163.20 163.20 170.70 171.90 171.70 171.90 171.70 171.90 171.70 171.90 185.70 186.10 177.70 178.90 186.10 177.10 178.90 186.10 178.90 186.10 196.10 196.10	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.80 1.20 0.18 0.45 1.02 0.25 0.79 0.94 1.01 0.72	Depth 3103 3133 3165 3196 3226 3257 3288 3320 3350	Blackhawk 95% Ss; 5% Ss trist [g : Sh dk gy-di	3420' Sh Occ m gy fri Gybn carb Azimuth 174.90 175.60 174.00 167.30 169.60 155.00 159.00 159.00	DL Angle 0.96 0.14 0.42 0.53 0.66 0.40 0.82 0.31
BACK BACK BROWD 9 - 10 Depth 538 566 602 633 664 687 727 757 757 817 344 376 997 1096 1097 1198 1159 1159 1159 1159	Deviation 1.03 1.22 1.20 1.25 1.34 1.33 1.43 1.43 1.43 1.43 1.43 1.45 1.55 1.	Azimuth 184.79 189.53 186.87 189.53 186.87 189.53 186.40 197.84 197.84 197.84 197.85 197.94 199.50 172.17 172.17 172.17 173.70 172.70 1	PROM (#) DL Angle 0.19 0.76 0.17 0.21 0.68 0.28 0.36 0.89 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.62 1.48 2.30	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1638 1720 1751 1782 1813 1844 1895 1996 1935 1997 2028 2060 2091	Deviation 0.89 0.75 0.73 0.84 0.51 0.83 0.85 0.61 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.18 1.30 1.75 1.76 1.70 1.61 1.91	Azimuth 190.80 190.50 201.30 216.50 196.70 196.00 146.50 156.00 156.00 156.40 196.20 196.40 196.20 196.70 1	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.23 1.04 0.55 1.23 1.04 0.55 1.23 1.04 0.59 0.83 1.06 0.59 0.83 1.06 0.59 0.83 0.54 1.59 0.83 0.54 1.59 0.83 0.54 1.59 0.83 0.54 1.59 0.83 0.54 1.59 0.83 0.54 1.59 0.83 0.54 1.59 0.83 0.54 1.59 0.83	Depth 2244 2275 2306 2337 2367 2399 2429 2460 2492 2523 2553 2584 2614 2644 2672 2703 2734 2764 2826 2826 2827 2827 2827 2828 2827 2827	RVEYS Deviation 2.27 2.24 2.06 1.95 1.48 1.22 0.96 1.95 1.48 1.22 1.70 1.60 1.50 1.60 1.82 1.77 1.20 0.90 0.90 0.90	Azimuth 147.80 156.50 158.70 170.10 171.70 171.90 163.70 1	Sample pen Sample Desc	Depth 3103 3133 3165 3196 3226 3257 3288 3320 3350	Blackhawk 95% Ss; 5% Ss trist [g : Sh dk gy-di	3420' Sh Occ m gy fri Gybn carb Azimuth 174.90 175.60 174.00 167.30 169.60 155.00 159.00 159.00	DL Angle 0.96 0.14 0.42 0.53 0.66 0.40 0.82 0.31
BACK GROUND 9 - 10 Dapth 538 662 633 684 695 727 757 757 817 824 826 82 826 82 826 82 826 82 826 82 826 82 826 82 826 82 826 82 826 82 826 82 826 82 826 82 826 82 826 82 826 82 826 82 826 826	GAS DATA (n t) CONN GAS	Asimuth 184.79 189.53 186.87 183.91 180.49 180.29 175.88 191.43.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 441.51 165.70 235.70 203.90	DL Angle 0.19 0.76 0.17 0.21 0.68 0.38 0.12 0.69 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.62 1.48 2.30 0.51	Depth 1407 1438 1468 1532 1563 1595 1626 1657 1688 1720 1751 1782 1813 1844 1875 1906 1935 1967 1997 2028 2060 2091 20120	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.18 1.30 1.75 1.76 1.91 1.88 1.95 1.74	Azimuth 190.80 190.50 201.30 218.50 194.00 187.70 194.00 187.70 194.00 157.60 184.00 157.60 156.00 156.00 156.00 156.00 156.00 156.00 156.00 154.00 154.00 154.00 154.00 155.00 156.00 1	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.43 1.29 0.65 1.23 1.04 0.43 1.09 0.59 0.63 0.59 0.50 0.50 0.50 0.50 0.50 0.50 0.50	Depth 2244 2275 2306 2397 2429 2460 2492 2523 2553 2584 2614 2672 2703 2734 2764 2826 2857 2919 2951	RVEYS Peviation 2.27 2.24 2.06 1.95 1.48 0.96 0.96 1.123 1.10 1.30 1.50 1.66 1.82 1.77 1.30 1.20 0.90 0.90 0.90	Azimuth 147.60 156.50 158.70 157.60 163.20 170.70 171.70 171.90 163.70 157.40 163.70 157.40 163.70 159.00 163.70 159.00 163.70 163.70 163.70 163.70 165.40 163.70 165.40 163.70 177.10 178.90 184.00 195.00 196.00 205.80 221.40	DL Angle 0.66 1.11 0.64 0.13 0.73 0.73 0.62 0.80 1.20 0.80 1.20 0.80 1.20 0.80 1.20 0.80 1.20 0.80 1.20 0.80 1.20 0.80 1.20 0.80 1.20 0.75 0.79 0.94 1.01 0.72 0.78 0.56 0.5	Depth 3103 3133 3165 3196 3226 3257 3288 3320 3350	Blackhawk 95% Ss; 5% Ss trist [g : Sh dk gy-di	3420' Sh Occ m gy fri Gybn carb Azimuth 174.90 175.60 174.00 167.30 169.60 155.00 159.00 159.00	DL Angle 0.98 0.14 0.42 0.53 0.66 0.40 0.82 0.31
BACK BROWD 9 - 10 538 566 602 633 664 637 777 757 817 344 376 9907 991 1066 1092 1159 1159 1159 1159 1159	Deviation 1.03 1.22 1.20 1.25 1.34 1.33 1.43 1.43 1.43 1.43 1.43 1.45 1.55 1.	Azimuth 184.79 189.53 186.87 189.53 186.87 189.53 186.40 197.84 197.84 197.84 197.85 197.94 199.50 172.17 172.17 172.17 173.70 172.70 1	PROM (#) DL Angle 0.19 0.76 0.17 0.21 0.68 0.28 0.36 0.89 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.62 1.48 2.30	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1638 1720 1751 1782 1813 1844 1895 1996 1935 1997 2028 2060 2091	Deviation 0.89 0.75 0.73 0.84 0.51 0.83 0.85 0.61 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.18 1.30 1.75 1.76 1.70 1.61 1.91	Azimuth 190.80 190.50 201.30 216.50 196.70 196.00 146.50 156.00 156.00 156.40 196.20 196.40 196.20 196.70 1	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.23 1.04 0.55 1.23 1.04 0.55 1.23 1.04 0.59 0.83 1.06 0.59 0.83 1.06 0.59 0.83 0.54 1.59 0.83 0.54 1.59 0.83 0.54 1.59 0.83 0.54 1.59 0.83 0.54 1.59 0.83 0.54 1.59 0.83 0.54 1.59 0.83 0.54 1.59 0.83	Depth 2244 2275 2306 2337 2367 2399 2429 2460 2492 2523 2553 2584 2614 2644 2672 2703 2734 2764 2826 2826 2827 2827 2827 2828 2827 2827	RVEYS Deviation 2.27 2.24 2.06 1.95 1.48 1.22 0.96 1.95 1.48 1.22 1.70 1.60 1.50 1.60 1.82 1.77 1.20 0.90 0.90 0.90	Azimuth 147.80 156.50 158.70 170.10 171.70 171.90 163.70 1	Sample pen Sample Desc	Depth 3103 3133 3165 3196 3226 3257 3288 3320 3350	Blackhawk 95% Ss; 5% Ss trist [g : Sh dk gy-di	3420' Sh Occ m gy fri Gybn carb Azimuth 174.90 175.60 174.00 167.30 169.60 155.00 159.00 159.00	DL Angle 0.98 0.14 0.42 0.53 0.66 0.40 0.82 0.31
BACK BROUND 9 - 10 Dapth 538 660 633 664 695 727 757 757 817 344 1066 907 1128 11997 11191 1121 1122 1223 1314	Deviation 1.03 1.22 1.25 1.32 1.34 1.33 1.44 1.43 1.43 1.05 1.00 1.	Asimuth 104.79 139.53 186.87 135.91 130.49 180.29 175.83 164.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 233.75 203.75	DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.28 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.62 1.44 2.30 0.51	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1688 17751 1782 1813 1844 1875 1906 1935 1967 1997 2028 2060 2091 2120 2152	Deviation 0.69 0.75 0.73 0.84 0.85 0.85 0.81 1.20 1.00 0.88 0.34 0.93 1.12 1.05 1.18 1.30 1.75 1.70 1.61 1.91 1.85 1.95 1.74 1.99	Azimuth 190.80 190.50 201.30 211.50 209.70 194.00 187.20 196.70 202.10 179.00 164.00 145.00 146.50 155.00 161.00 155.40 164.20 154.10 155.20	DE VIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.129 0.65 1.23 1.04 0.43 1.06 0.43 1.09 0.43 1.09 0.43 1.09 0.43 1.09 0.65 1.23 1.04 0.43 1.09 0.65 1.23 0.65 1.23 0.65 1.23 0.65 1.23 0.65 1.23 0.65 1.23 0.65 1.23 0.65 1.23 0.65 1.23 0.65 1.23 0.65 1.23 0.65 1.23 0.65 1.23 0.65 1.23 0.65 1.23 0.65 1.23 0.65	Depth 2244 2275 2306 2337 2367 2399 2429 2452 2523 2553 2564 2614 2644 2672 2703 2734 2734 2734 2734 2734 2734 2734 273	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.45 1.22 0.98 0.98 0.99 1.130 1.100 1.30 1.60 1.66 1.82 1.77 1.30 1.20 0.90 0.90 0.90 0.90 0.80	Azimuth 147.80 156.50 158.70 157.60 163.20 170.70 171.10 171.20 171.20 170.60 163.40 1	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.80 1.20 0.18 0.45 1.02 0.25 0.79 0.94 1.01 0.72 0.78 0.56	Depth 3103 3133 3165 3196 3226 3257 3288 3320 3350	Blackhawk 95% Ss; 5% Ss trist [g Sh dk gy-di	3420' Sh Occ m gy fri Gybn carb Azimuth 174.90 175.60 174.00 167.30 169.60 155.00 159.00 159.00	DL Angle 0.98 0.14 0.42 0.53 0.66 0.40 0.82 0.31
BACK BROWD 9 - 10 538 566 602 633 664 695 727 757 757 817 844 1066 10128 1159 11151 1121 1222 1283 1314	Deviation 1.03 1.22 1.20 1.25 1.34 1.33 1.43 1.43 1.43 1.43 1.43 1.45 1.15 1.	Azimuth 184.79 189.53 186.87 189.53 186.87 189.53 186.40 197.88 191.75 88 164.40 182.92 186.87 197.94 109.50 172.01 126.70 132.57 173.03 141.51 165.70 235.75 203.90 173.03 172.10	PROM (#) DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.99 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.62 1.48 2.30 0.51 0.55	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1638 1720 1751 1782 1813 1844 1875 1906 1935 1997 2028 2060 2091 2120 2153	Deviation 0.89 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.18 1.30 1.75 1.76 1.79 1.88 1.99 2.03	Azimuth 190.80 190.50 201.30 216.50 196.70 196.70 197.60 196.70 1	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.23 1.04 0.55 1.23 1.06 0.59 0.83 1.08 0.54 1.59 0.83 0.86 0.39 0.86 0.39	Depth 2244 2275 2306 2337 2367 2399 2429 2460 2492 2523 2553 2584 2614 2644 2672 2703 2734 2764 2826 2826 2837 2919 2951 2981 3013 3042	RVEYS Deviation 2.27 2.24 2.06 1.95 1.95 1.48 1.22 0.96 1.23 1.10 1.50 1.66 1.82 1.77 1.20 0.90 0.80 0.99 0.80 0.99 0.80 0.99	Azimuth 147.80 156.50 158.70 170.10 171.70 171.90 163.70 165.40 163.70 165.40 169.70 177.10 1	Sample pen Sample Desc	Depth 3103 3133 3165 3196 3226 3257 3288 3320 3350	Blackhawk 95% Ss; 5% Ss trist [g Sh dk gy-di	3420' Sh Occ m gy fri Gybn carb Azimuth 174.90 175.60 174.00 167.30 169.60 155.00 159.00 159.00	DL Angle 0.98 0.14 0.42 0.53 0.66 0.40 0.82 0.31
BACK BROWD 9 - 10 538 566 602 633 664 695 727 757 757 817 844 1066 10128 1159 11151 1121 1222 1283 1314	Deviation 1.03 1.22 1.20 1.25 1.34 1.33 1.43 1.43 1.43 1.43 1.43 1.45 1.15 1.	Azimuth 184.79 189.53 186.87 189.53 186.87 189.53 186.40 197.88 191.75 88 164.40 182.92 186.87 197.94 109.50 172.01 126.70 132.57 173.03 141.51 165.70 235.75 203.90 173.03 172.10	PROM (#) DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.99 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.62 1.48 2.30 0.51 0.55	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1638 1720 1751 1782 1813 1844 1875 1906 1935 1997 2028 2060 2091 2120 2153	Deviation 0.89 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.18 1.30 1.75 1.76 1.79 1.88 1.99 2.03	Azimuth 190.80 190.50 201.30 216.50 196.70 196.70 197.60 196.70 1	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.23 1.04 0.55 1.23 1.06 0.59 0.83 1.08 0.54 1.59 0.83 0.86 0.39 0.86 0.39	Depth 2244 2275 2306 2337 2367 2399 2429 2460 2492 2523 2553 2584 2614 2644 2672 2703 2734 2764 2826 2826 2837 2919 2951 2981 3013 3042	RVEYS Deviation 2.27 2.24 2.06 1.95 1.95 1.48 1.22 0.96 1.23 1.10 1.50 1.66 1.82 1.77 1.20 0.90 0.80 0.99 0.80 0.99 0.80 0.99	Azimuth 147.80 156.50 158.70 170.10 171.70 171.90 163.70 165.40 163.70 165.40 169.70 177.10 1	Sample pen Sample Desc	Depth 3103 3133 3165 3196 3226 3257 3288 3320 3350	Blackhawk 95% Ss; 5% Ss trist [g Sh dk gy-di	3420' Sh Occ m gy fri Gybn carb Azimuth 174.90 175.60 174.00 167.30 169.60 155.00 159.00 159.00	DL Angle 0.98 0.14 0.42 0.53 0.66 0.40 0.82 0.31
Depth 538 566 602 633 664 877 757 757 757 757 751 1159 1159 1159 11	Deviation 1.03 1.22 1.20 1.25 1.34 1.33 1.43 1.43 1.43 1.43 1.43 1.45 1.15 1.	Azimuth 184.79 189.53 186.87 189.53 186.87 189.53 186.40 197.88 191.75 88 164.40 182.92 186.87 197.94 109.50 172.01 126.70 132.57 173.03 141.51 165.70 235.75 203.90 173.03 172.10	PROM (#) DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.99 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.62 1.48 2.30 0.51 0.55	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1638 1720 1751 1782 1813 1844 1875 1906 1935 1997 2028 2060 2091 2120 2153	Deviation 0.89 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.18 1.30 1.75 1.76 1.79 1.88 1.99 2.03	Azimuth 190.80 190.50 201.30 180.50 201.30 218.50 209.70 194.00 187.20 196.70 202.10 197.90 157.60 148.00 148.50 152.00 155.40 164.20 154.40 155.40 154.10 155.20 145.10 145.10	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 0.43 1.09 0.65 1.23 1.04 0.43 1.05 0.83 0.54 1.59 0.50 0.39 1.12 1.05 0.26 0.10 0.86 0.13 1.52	Depth 2244 2275 2306 2337 2367 2399 2429 2460 2523 2553 2553 2564 2614 2674 2672 2703 2734 2764 2826 2856 2887 2919 2951 2981 3013 3042 3072	RVEYS Deviation 2.27 2.24 2.06 1.95 1.95 1.48 1.22 0.96 1.23 1.10 1.50 1.66 1.82 1.77 1.20 0.90 0.80 0.99 0.80 0.99 0.80 0.99	Azimuth 147.80 156.50 158.70 170.10 171.70 171.90 163.70 165.40 163.70 165.40 169.70 177.10 1	Sample pen Sample Desc	Depth 3103 3133 3165 3196 3226 3257 3288 3320 3350	Blackhawk 95% Ss; 5% Ss trist [g Sh dk gy-di	3420' Sh Occ m gy fri Gybn carb Azimuth 174.90 175.60 174.00 167.30 169.60 155.00 159.00 159.00	DL Angle 0.96 0.14 0.42 0.53 0.66 0.40 0.82 0.31
MCLANVE BACK BROWN 9 - 10 Depth 538 662 633 662 633 664 695 727 787 817 817 817 1034 818 1097 11159 11121 11221 11221 11221 11221 11231 11346 11377	Deviation 1.03 1.22 1.20 1.25 1.34 1.33 1.43 1.43 1.43 1.43 1.43 1.45 1.15 1.	Azimuth 184.79 189.53 186.87 189.53 186.87 189.53 186.40 197.88 191.75 88 164.40 182.92 186.87 197.94 109.50 172.01 126.70 132.57 173.03 141.51 165.70 235.75 203.90 173.03 172.10	PROM (#) DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.99 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.62 1.48 2.30 0.51 0.51 0.55 0.62	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1813 1844 1875 1906 1935 1967 2028 2060 2091 2120 2152 2133 2213	Deviation (%) Deviation (%) (%) (%) (%) (%) (%) (%) (%) (%) (%)	Azimuth 190.80 190.50 201.30 201.30 216.50 206.70 194.00 187.20 196.70 202.10 196.70 164.00 155.00 156.00 156.00 155.00 1	DEVIAT DL Angle 1.35 0.39 0.47 1.08 1.10 1.08 1.13 1.08 1.13 1.08 1.13 1.09 0.43 1.23 1.04 1.23 1.04 0.59 0.83 1.08 1.12 1.09 0.83 1.09 0.43 1.29 0.43 1.29 0.43 1.29 0.43 1.29 0.43 1.29 0.43 1.29 0.43 1.29 0.45 1.23 1.04 0.43 1.29 0.85 1.23 1.04 0.43 1.25 0.29 0.39 1.12 1.05 0.39 1.15 0.26 1.03 0.86 0.13 1.52	DEFORE UNITS ION SUI Depth 2244 2275 2306 2337 2367 2399 2460 2492 2460 2492 2523 2553 2584 2614 2644 2672 2703 2734 2764 2826 2856 2857 2981 3013 3042 3072 RCULAT PLMP	RVEYS Deviation 2.27 2.24 2.06 1.95 1.95 1.48 0.98 1.22 0.98 0.98 1.23 1.10 1.50 1.50 1.60 1.52 1.77 1.30 1.60 1.50 1.60 1.50 1.60 1.60 1.77 1.70 1.70 1.70 1.70 1.70 1.70 1.7	Azimuth 147.80 156.50 158.70 170.10 171.70 171.90 171.70 163.70 1	Sample pen Sample Desc	Depth 3103 3133 3196 3226 3257 3288 3320 3350 3381	Blackhawk 95% Ss; 3% 95% Ss; 3% 95% Ss; 3% 95% Ss; 3% 95% Sh this fg 1.08 1.02 1.15 1.26 1.45 1.38 1.40 1.40 1.36 1.17 2	3420' Sh Sh Scen mgy fri gybn carb Azimuth 174.90 175.60 174.00 167.30 168.60 155.00 155.00 155.00 154.50	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79
Depth 538 566 602 633 664 877 757 757 757 757 751 1159 1159 1159 11	Deviation 1.03 1.22 1.20 1.25 1.34 1.33 1.43 1.43 1.43 1.43 1.43 1.45 1.15 1.	Azimuth 184.79 189.53 186.87 189.53 186.87 189.53 186.40 197.88 191.75 88 164.40 182.92 186.87 197.94 109.50 172.01 126.70 132.57 173.03 141.51 165.70 235.75 203.90 173.03 172.10	DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.38 0.29 0.12 0.68 1.29 1.80 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.62 1.48 2.30 0.51 0.55 0.62	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1628 1770 1751 1782 1813 1844 1875 1906 2091 22120 22152 2183 2213	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.18 1.30 1.75 1.70 1.61 1.91 1.88 1.95 1.91 1.88 1.99 2.03 2.42	Azimuth 190.80 190.50 201.30 218.50 201.30 218.50 209.70 194.00 187.20 196.70 202.10 179.00 157.60 148.00 148.50 152.00 161.00 155.40 164.00 155.40 164.10 155.20 155.00 161.00	DEVIAT DL Angle 1.35 0.39 0.47 1.08 1.13 1.08 1.13 1.08 1.13 1.08 1.13 1.09 0.43 1.23 1.04 0.43 1.29 0.43 1.29 0.43 1.29 0.43 1.29 0.43 1.20 0.85 1.23 1.04 0.43 1.25 0.85 1.23 1.04 0.43 1.25 0.85 1.23 1.04 0.43 1.06 0.59 0.83 1.12 1.05 0.83 0.54 1.59 0.30 0.83 1.15 0.28 1.03 0.86 0.13 1.52	Depth 2244 2275 2306 2337 2367 2399 2429 2429 2452 2523 2553 2564 2614 2674 2672 2703 2734 2764 2672 2703 2734 2764 2672 2703 2734 2764 2672 2703 2734 2764 2672 2703 2734 2764 2672 2703 2734 2764 2672 2703 2734 2764 2767	RVEYS Deviation 2.27 2.24 2.06 1.95 1.95 1.48 0.98 1.22 0.98 0.98 1.23 1.10 1.50 1.50 1.60 1.52 1.77 1.30 1.60 1.50 1.60 1.50 1.60 1.60 1.77 1.70 1.90 0.90 0.90 0.90 0.90 0.90 0.90 0.9	Azimuth 147.80 158.70 158.70 157.60 163.20 170.70 171.10 171.20 171.20 171.70 175.40 163.40 1	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.80 1.20 0.18 0.48 1.02 0.25 0.79 0.94 1.01 0.72 0.78 0.58	Depth 3103 3135 3196 3226 3320 3350 3381	Blackhawk 95% Ss; 5% Ss trist [g Sh dk gy-di	3420' Sh Sh Cope m gy fri C gybn carb Azimuth 174.90 175.60 174.00 167.30 169.60 155.00 159.00 154.50	DL Angle 0.98 0.14 0.42 0.53 0.66 0.40 0.52 0.31 0.54 0.79

MUD PUMPS NO. 1 NO. 2 NO. 3 COMBINED

EVERGREEN OPERATING, INC. DAILY DRILLING REPORT

RIG CONTACT INFORMATION:

OFFICE TRAILER / FAX: 970 942 7543

CONSULTANT HAND CELL: 303 913 1054

DOGHOUSE: 307 258 7315

PUSHER:

DATE SPU	DATE SAM DEPTH	
9/1/2004 8/1	6/2004	3522
REPORT NO.	24 HR FOOTA	IGE
16		73
DRLG CONTRACTOR	DAYS SINCE	SPUD
Elenburg, Rig 1	2	16
CONSULTANT	AFE #	API#
John C. Lamb		43-007-30718

ACTIVITY AT REPORT TIME:

Tripping out of hole to run intermediate casing

DAILY COST

\$ 25,379 \$ 460,865 \$ -

CF	IRONOLOG	Y OF DAIL	Y OPERATIONS (06:00 - 06:00	HRS)	SLOW	PUMP RA	TE DATA:		STRING	G WEIGHT INFO	
		HOURS			Depth	SPM	Pressure	Eff BHA Wt	Rotating:	Slackoff:	Hoisting:
FROM (hrs)	TO (hrs)	(hrs)	Activity:	<u> </u>	3493	54	350	43,000	110,000	109,000	116,000
06:00	08:30	2.50	Rotate 3449 - 3472								
08:30	09:15	0.75	Slide 3472 - 3475, aborted slide due t	o slow ROP							
09:15	09:45	0.50	Rotate 3475 - 3478					··			
09:45	10:30	0.75	Rig repair - replace valve seat and val	lve in pump							
10:30	12:45	2.25	Rotate 3478 - 3493								
12:45	13:15	0.50	Service rig								
13:15	18:30	5.25	Rotate 3493 - 3522, bit torquing up be	low 3509'							
18:30	20:00	1.50	Short trip to 2500'								
20:00	20:45	0.75	Circulate to clean hole								
20:45	21:45	1.00	Trip out of hole								
21:45	00:15	2.50	Rig repair - replace hydraulic valve as	sembly in boom	clamp control						
00:15	05:45	5.50	Trip out of hole							. <u> </u>	
05:45	06:00	0.25	LD directional tools								
										REC	1 3 2004
										DEC	1 2 2004
									0	YV. OF OIL,	GAS & MINING
	-										
TOTAL	HOURS	24.00									

SUMMARY		
	DAILY	CUM
DESC.	(hrs)	(hrs)
Drill	11.25	259.75
Trip	8.00	30.75
Circulate	0.75	1.50
Rig Repair	3.25	26.00
Rig Service	0.50	5.25
Dev Survey		
NU / ND		8.50
Cement		
Run Casing		
woc		
OH Logging		
Mix Mud		
MI & RU		6.00
RatHole		
Mouse Hole		
Fishing		
Other		0.50
Coring		
inspect BHA		
Cut drig line		1.25
Wash & Ream		1.25
Drill Cement		6.25
Test BOPE		1.50
W00		
PU/LD BHA	0.25	3.50
insp circ equip		3.50
TOTALS	24.00	355.50

			DAILY		CUM	AFE	
COST CODE	DESCRIPTION OF DAILY COSTS		(\$)		(\$)	(\$)	
2030.010	Land, Legal, Title, Survey, Arch, Damages, Permits, Signs	_					
2030.031	Dirtwork, Road, Location, Pits, Liner	\perp					
2030.019	Contract Drilling 9480 / day 392.5 / h cond 5071 26,000 mob sfc 36791	\$	9,480	\$	216,632		
2032.001	Water	\$	1,256	\$	4,866		
2032.013	Drill Bits, Stabilizers, Reamers	\bot		\$	34,000		
2031.046	Cementing and Services			\$	5,000		
2030.053	Coring and Analysis	4					
2030.052	Logging	ļ					
2030.054	Mud Logging	\$	750		2,250		
2030.037	Rental Equipment	\$	1,501	\$	27,384		
2030.028	Transportation	\$	480	\$	8,842		
2032.004	Mud and Chemicals	\$	4,838	+ -	28,168		
	Directional Services, Mud Motors	\$	6,274	\$	95,272		
	Intermediate casing			<u> </u>			
2030.035	Contract Labor			\$	2,920	<u> </u>	
2030.022	Engineering / Supervision	\$	800	\$	12,800		
2030.099	Intangible Miscellaneous and Contingencies			<u> </u>			
2040.001	Surface Casing			\$	17,790		
2040.004	Production Casing			<u> </u>			
1011.000	Float Equipment, Shoes, Centralizers			_			
1041.000	Wellhead Equipment			\$	4,941		
1073.000	Bottom Hole Pump / Gas Lift / Other	1_					
1104.000	Drivehead, Engine / Motor and Hydraulic Pump / Electric Unit			L_			
2040.052 / 2040.055	Valves and Fittings, Small / Large	\perp		L.			
2040.067	Other Surface Equipment	1					
2040.099	Tangible Miscellaneous and Contingencies						
	TOTAL COSTS	S	25,379	s	460,865	s	

Repor		Date:	7	Vell Nam	Θ:	_		Jensen	NG REF	OIN						Pag
	- 47	1965			 -		Talifer I	0013011	BIT REC	ORD			-			
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DR DR		75 \$ 7,0 00 \$ 1,6		-			7	-	- 1	воттомн						
todniler		90 \$ 1,3					. 1		** park ***		MAXIMUM	MINIMUM	1		441	
l mud clar			75	DESCRIP	TION OF	Rus	6.0			READ SIZE	0.0	I.D.	LENGTH	1,0000 6.0	HRS SINCE	
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ock Sub		50 \$ 3,7	_	obe 4 Stage		g Mud Motor	P	llack Max	6 5/8 F		12.250 8.000	+	1.25	+	 	
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<u>«</u>	-		$\dashv \vdash$		Drill Co			SDI	6 5/8 R		8,000	3.250	30.58	†		+
er .	+		┨┝—	Hang Off S		ap Sub		SDI	6 5/8R	6 5/8 R	7.750	3.750	8.94			
×	+	+	$\dashv \vdash \vdash$	7 70/	XO C	-11	+	SDI	6 5/8 H9		8.000	3.250	2.35			
*		-	\dashv \vdash \vdash	7 - 7 3/4	XO XO	Ollars	 	rig	6 5/8 H9		7.750	2.250	340.02			
TOTALS	\$ 1,50	1 \$ 27,38	41	10 - 6 1/2		ollars	+-	SDI	4 1/2 XH		7.750	2.625	2.35	1		
								rig	4 1/2 XI	4 1/2 XH	6.500	2.250	309.53			
AMPLE	1	MUD	Total		1.1				ING MUD		4	345 (357)	50. 194	avojavinka		Deget Fee
DEPTH	TIME	MUD WT.	VISCOS		//YP	KCL	GEL STRENGT	FILTRAT		CAKE		SAND			7 SM. A	
(A)	(hh:mm)	(PPg)	(sec/q			(%)	(IN 100 fc		CALCIUM n) (ppm)	THICKNESS (/32 in)	50LID5 (% vol)	CONTENT	pН	CHLORIDES	ALKALINITY	LCM
3,522_	18:30	9.30	37	8	/ 13	2.20	4/8	15.0	20	2	5.5	(% vol) 1/4	9.5	(ppm) 14,000	Pf/Mf	lb/gat
	+	 					+						J.J	.4,000	.9 / 4	1 -
							4		Щ.							
7 (4)			177		Seediger	Ast Latin	D	AILY MUI	COSTR	INVENTOR	Υ					
				T					10/11/11		i de la companya da l					
			BARITE					SODA AS	H UNIDRULL	SOLKWICK	PAC-R	PHPA	CEDAR	12220000		TOTAL
	<u> </u>		(sx.)	2.4 (2.5)	K GEL	CAUSTIC (ex.)	LIME	4.4						TRUCKING		COSTS
COST			2012/06/2012	2.4 (2.5)	K GEL	CAUSTIC (ex)	(sx)	(9x)	(*×)	(sx)	(sx)	(9#)	(s×)	TRUCKING (\$)	,,,,,,,,,,	costs (\$)
	VENTORY		2012/06/2012	2.4 (2.5)			44	4.4								
RTING IM	RECEIVED		(sx)	2.4 (2.5)			44	4.4								
RTING IM INTORY R	RECEIVED 4 HOURS		(sx)	2.4 (2.5)			44	4.4								
ATING IM ENTORY R D LAST 24 ING INVE	RECEIVED 4 HOURS NTORY		(sx)	2.4 (2.5)			44	4.4								
RTING IM ENTORY R D LAST 24 ING INVEY LY MUD CO	RECEIVED 4 HOURS NTORY OST	37	(sx)	2.4 (2.5)			44	4.4								
RTING IM ENTORY R D LAST 20 ING INVER Y MUD CO VIOUS CU	RECEIVED 4 HOURS NTORY	37	(sx)	2.4 (2.5)			44	4.4								
RTING IM ENTORY R D LAST 20 ING INVER Y MUD CO VIOUS CU	RECEIVED 4 HOURS NTORY OST	37	(sx)	2.4 (2.5)			44	4.4								
RTING IM ENTORY R D LAST 2/ ING INVER Y MUD CO VIOLIS CU ULATIVE	RECEIVED 4 HOURS NTORY OST MULATIVE COS MUD COST		120			(ex)	(sx)	MUD L	(ex)	(ex)	(6x)					
RTING IM ENTORY R D LAST 2/ ING INVER Y MUD CO VIOLIS CU ULATIVE	RECEIVED 4 HOURS NTORY OST		(ex)	INTERVAL	x)	(ex)	OF PENETRA	MUD L	OGGER R	EPORT SHOW GAS DAT	(sx)	(gai)	(s.x.)	6)		5
RTING IM INTORY R D LAST 24 ING INVEL Y MUD CO VIOUS CU ULATIVE	RECEIVED A HOURS NTORY OST MULATIVE COST MUD COST O GAS DATA (In	Units)	(ex) 120 SHOW FROM	INTERVAL.	x)	(ex) PATE BEFORE	OF PENETRA DURING	MUD L.	OGGER R	EPORT SHOW GAS DAT	(6x)		(s.x.)		P100' Castleg	5
RTING INM ENTORY R D LAST 22 ING INVER Y MUD CO VIOUS CU ULATIVE MUD MACK	RECEIVED 4 HOURS NTORY OST MULATIVE COS MUD COST	Units)	(ex)	INTERVAL	0	(ex)	OF PENETRA	MUD L	OGGER R	EPORT SHOW GAS DAT DURING UNITS	(SE)	(gal)	(ax)	Price River 2	420'	ate 3110'
RTING INM ENTORY R D LAST 22 ING INVEI Y MUD CO VIOUS CU ULATIVE MUD SACK	RECEIVED 4 HOURS NTORY OST MULATIVE COST 0 GAS DATA (In CONN GAS	Units)	(ex) 120 SHOW FROM (f)	INTERVAL T	000	RATE: BEFORE (A)	OF PENETRA. DURING. (8) 5	MUD L RON AFTER (8)	OGGER R	EPORT SHOW GAS DAT DURING UNITS 43	(sx)	(gal) Formation To Sample perce	(sx)	Price River 2	420'	ate 3110'
RTING IMM INTORY R D LAST 20 ING INVER Y MUD CO VIOUS CU ULATIVE MUD SACK ROUND 7 - 9	RECEIVED 4 HOURS NTORY OST MULATIVE COS MUD COST CONN GAS 7 - 9	Units)	(ex) 120 Show FROM (0) 3445	INTERVAL T (6	000	RATE (BEFORE (A) 11	OF PENETRA DURING (8)	MUD L.	OGGER R	EPORT SHOW GAS DAT DURING UNITS	(SE)	(gal)	(sx)	Price River 2	420'	ate 3110'
RTING IMM NTORY R D LAST 20 NG INVER Y MUD CO JIOUS CU ULATIVE MUD NACK COUND	RECEIVED 4 HOURS NTORY OST MULATIVE COS MUD COST CONN GAS 7 - 9	Units)	(ex) 120 Show FROM (0) 3445	INTERVAL T (6	000	RATE (BEFORE (A) 11	OF PENETRA. DURING. (8) 5	MUD L RON AFTER (8)	OGGER R	EPORT SHOW GAS DAT DURING UNITS 43	(SE)	(gal) Formation To Sample perce	(sx)	Price River 2	420'	ate 3110'
RTING IMM NTORY R D LAST 20 NG INVER Y MUD CO JIOUS CU ULATIVE MUD NACK COUND	RECEIVED 4 HOURS NTORY OST MULATIVE COS MUD COST CONN GAS 7 - 9	Units)	(ex) 120 Show FROM (0) 3445	INTERVAL T (6	000	RATE (BEFORE (A) 11	OF PENETRA. DURING. (8) 5	MUD L RON AFTER (8) 17	OGGER R BEFORE UNIS 18	EPORT SHOW GAS DAT DURING UNITS 43 53	(SE)	(gal) Formation To Sample perce	(sx)	Price River 2	420'	ate 3110'
NTORY R LAST 20 NG INVER Y MUD CO TIOUS CU LATIVE MUD ACK OUND - 9 18	A HOURS A HOURS NOTORY OST MULATIVE COS MUD COST CON GAS 7 - 9 18 - 20	Units)	(sr) 120 120 SHOW FROM (FROM 3445) 3515	INTERVAL T. (6) (4) (34) (35)	D D D D D D D D D D D D D D D D D D D	RATE: BEFORE: (6) 11 16	OF PENETRAL DURING S 11	MUD L TION AFTER (h) 8 17	OGGER RI BEFORE UNTS 18	EPORT SHOW GAS DAY CURING LANTS 43 53	A AFTER UNITS 8	Formation To Sample Descrip	(sx)	Price River 2	420'	ate 3110'
NTORY R LAST 20 NG INVER Y MUD CO VIOUS CU LATIVE MUD ACK OUND - 9 18	RECEIVED 4 HOURS NTORY OST MULATIVE COS MUD COST CONN GAS 7 - 9	Units)	(ex) 120 Show FROM (0) 3445	INTERVAL TO (6 34-35)	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	RATE: BEFORE (8) 11 16	OF PENETRAL DURING (8) 5 11	MUD L RON AFTER (b) 17 DEVIAT	OGGER R BEFORE UNTS 8 18	EPORT SHOW GAS DAT DURING UNITS 43 53 EVEYS Deviation	A AFTER UNITS 8	Formation To Sample perce Sample Descrip	(sx)	Price River 2	420'	ate 3110'
MUD COUND ACK OUND 18	A HOURS A HOURS NORY OST MULATIVE COS MUD COST CONN GAS 7 - 9 18 - 20 Deviation	Units) TRIP GAS Azimuth	(tr.) 120 SHOW FROM (t) 3445 3515	NTERVAL T. (0 344 35	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	PATE PATE	OF PENETRA DURING (a) 5 11	MUD L TION AFTER S 17 DEVIAT	OGGER R BEFORE UNIS 8 18 10 Depth Depth 2244	EPORT SHOW GAS DAT DURING LIAITS 43 53 RVEYS Deviation 2 27	AFTER UNITS 8	Formation To Sample perce Sample Descrip	ps: intages; idon: Depth 3103	Price River 2 Blackhawk 3 Ss 40%, Sh 3	420' 10%, Sitst 30'	ate 3110'
ITING IMM NTORY R LAST 22 NG INVECT MUCCO ACK OUND 9 18	A HOURS NORY OST MULATIVE COS MUD COST CONN GAS 7 - 9 18 - 20 Deviation 1.03 1.22 1.20	Azimuth 184.79 185.53 186.87	(ex) 120 120 SHOW FROM (N) 3445 3515 DL Angle 0.19 0.78	INTERVAL TO (6 34-35)	99 99 48 199 197 197 197 197 197 197 197 197 197	RATE: BEFORE (8) 11 16	OF PENETRA DORING (a) 5 11 Azimuth 190.60	MUD L TION AFTER (h) 8 17 DEVIAT DL Angle 1,35 0,39	Depth 2275	EPORT SHOW GAS DAY DURING LANTS 43 53 EVEYS Devision 2.27 2.24	A AFTER UNIS 8 147.80 156.50	Formation To Sample Descrip DL Angle 0.66 1.11	ps: ontages: blon: Depth 3103 3133	Price River 2 Blackhawk 3 Ss 40%, Sh 3	Azimuth 174.90 175.60	DL Angle 0.96 0.14
ITING IMM NTORY R LAST 22 SG INVERT NG INVERT MUCO MUCO MUCO AACK AATVE 18 18 20 21 33	A HOURS A HOURS A HOURS AND ATT 100 CON CON CON GAS 7 - 9 18 - 20 Deviation 1.03 1.22 1.20 1.25	Azimuth 184.79 189.53 166.87 188.91	SHOW FROM (N) 3445 3515 DL Angle 0.19 0.176 0.17 0.21	INTERVAL T. (r. 344 35 35 146 146 144 143 144 144 144 144 144 144 144 144	00 00 00 00 00 00 00 00 00 00 00 00 00	RATE: BEFORE: (6) 11 16 Deviation 0.69 0.75	OF PENETRA DURING (a) 5 11	MUD L TION AFTER (b) 8 17 DEVIAT DL Angle 1.35 0.39 0.47	OGGER RIUNTS 8 18 10 Depth 2244 2275 2306	EPORT SHOW GAS DAT DURING UNITS 43 53 53 EVEYS Deviation 2.27 2.24 2.06	A AFTER UNITS 8 8 156.50 158.70	Formation To Sample perce Sample Descrip DL Angle 0.66 1.11 0.64	ps: Integes:	Price River 2 Blackhawk 3 Ss 40%, Sh 3	Azimuth 174.90 174.00	DL Angle 0.96 0.14 0.42
ITING IMM PLAST 2 MUDGINE COLORS MUDGINE MUDG	MECBIVED A HOURS NTORY OST MULATIVE COS GAS DATA (In In In In In In In In In In In In In I	Azimuth 184.79 189.53 186.87 180.49	SHOW FROM C SHOW FROM C SHOW FROM C SHOW C	NTERVAL 7. (c. 344 35 146 149 153 158 159 159 169 169 169 169 169 169 169 169 169 16	00 00 00 00 00 00 00 00 00 00 00 00 00	RATE DEFORE (8) 11 16 0.69 0.75 0.73	DURING (8) 111 111 190.80 190.50 201.30	MUD L TION AFTER (h) 8 17 DEVIAT DL Angle 1,35 0,39	Depth 2275	EPORT SHOW GAS DAT DURING LIAITS 43 53 EVEYS Deviation 2 27 2 24 2 06 2 05	Arimuth 147.80 156.50 157.60	Formation To Sample perce Sample Descrip DL Angle 0.66 1.11 0.64 0.13	(ex) ps: intages: idon: Cepth 3103 3133 3165 3196	Price River 2 Blackhawk 3 Ss 40%, Sh 3 Deviation 1.06 1.02 1.15 1.26	Azimuth 174.90 175.60 167.30	DL Angle 0.96 0.14 0.42 0.58
INTING IMM INTORY R LAST 22 MG INVERT MUDGIC	Deviation 1.02 Deviation 1.02 1.22 1.20 1.26 1.26	Azimuth 184.79 185.53 186.87 180.99 180.29	(ex.) 120 120 120 120 120 120 120 120 120 120	Dep 140 143 148 149 153 156 156 156 156 156 156 156 156 156 156	00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Parties (a) (b) (1) (c) (c) (d) (d) (d) (d) (d) (d) (d) (d) (d) (d	DURING (a) 5 11 11 190.80 201.30 218.50 208.70	MUD L. TION AFTER 5 17 DEVIA1 DLAngie 1.35 0.39 0.47 0.83	OGGER R. berone unis 8 18 18 2244 2275 2306 2337	EPORT SHOW GAS DAT DURING UNITS 43 53 53 EVEYS Deviation 2.27 2.24 2.06	A AFTER UNITS 8 8 156.50 158.70	Formation To Sample Descrip DL Angle 0.66 1.11 0.64 0.13 0.73	ps: ps: ps: ps: ps: ps: ps: ps: ps: ps:	Price River 2 Blackhawk 3 Ss 40%, Sh 3 Deviation 1.06 1.02 1.15 1.26 1.45	Azimuth 174.90 175.60 176.00 169.60	DL Angle 0.96 0.14 0.42 0.58 0.66
MUD CACALOR STATE OF THE STATE	A HOURS A HOURS A HOURS AND ATT 100 CON CON GAS 7 - 9 18 - 20 Deviation 1.03 1.22 1.20 1.25 1.34 1.24 1.25 1.34 1.25 1.32	Azimuth 184.79 185.53 186.87 188.91 180.49 180.29 175.88	SHOW FROM (N) 3445 3515 DL Angle 0.19 0.176 0.17 0.21 0.68 0.68 0.26 0.26 0.26	Dep 140 143 148 149 153 156 159	55 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	PATE: (ex.) RATE: (A) (A) 11 16 Deviation 0.69 0.75 0.73 0.34 0.51 0.83 0.83	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00	MUD L TION AFTER (h) 8 17 DE Angle 1,35 0,39 0,47 0,83 1,08	Depth 2244 2275 2336 2336 2367	EPORT SHOW GAS DAY DURING LANTS 43 53 53 EVEYS Deviation 2.27 2.24 2.06 2.05 1.95	After UNIS 8 156.50 158.70 157.60 163.20	Formation To Sample perce Sample Descrip DL Angle 0.66 1.11 0.64 0.13	Depth 3103 3165 3196 3226 3226 3227	Price River 2 Blackhawk 3 Ss 40%, Sh 3 Deviation 1.06 1.02 1.15 1.28 1.45 1.38	Azimuth 174.90 175.60 174.00 167.30 169.60	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40
MUD CICLORY R MU	Deviation Deviation 1.22 1.22 1.26 1.34 1.32 1.34 1.34	Asimuth 184.79 189.53 166.87 180.49 157.88 164.40	SHOW FROM (19 0.19 0.78 0.17 0.21 0.28 0.88 0.28 0.39	Depp 1446 143 156 159 162	th (77	PATE (ex.) PATE (SEFORE (b) 11 16 16 16 16 16 16 16 16 16 16 16 16	Azimuth 190.60 190.50 201.30 218.50 206.70 194.00 187.20	MUD L TION AFTER (b) 8 17 DE VIA1 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43	Depth 2244 2275 2396 2397 2367 2399 2460	EPORT SHOW GAS DAY DURING LIMITS 43 53 53 53 53 53 53 53 54 55 55 55 55 55 55 55 55 55 55 55 55	Azimuth 147.80 156.50 158.70 157.60 163.20	Formation To Sample perces Sample Descrip DL Angle 0.66 1.11 0.64 0.13 0.73 1.62	(ex) Depth 3103 3133 3165 3226 3227 3257	Price River 2 Blackhawk 3 Ss 40%, Sh 3 Deviation 1.06 1.02 1.15 1.26 1.45 1.38 1.40	Azimuth 174.90 174.00 167.30 169.60 155.00	DL Angle 0.96 0.14 0.42 0.55 0.66 0.40 0.82
LITING INN LISTING INN LISTING INN MUD CI	Deviation 1.03 1.22 1.26 1.34 1.34 1.33	Azimuth 184.79 180.53 105.57 185.91 180.49 180.29 175.88 164.40 162.92	(ex.) 120 120 120 120 120 120 120 120 120 120	Dep 140 143 148 149 153 156 159 182 165	bth 77 - 88 8 8 9 9 9 9 2 2 3 3 5 5 6 6 7 7	Parte (a) 11 16 16 17 17 18 18 18 18 18 18 18 18 18 18 18 18 18	DEPENETRA: DURING (8) 5 5 11 11 190.80 201.30 218.50 206.70 194.00 187.20 198.70 202.10	MUD L HON (6) 6 17 17 17 17 17 17 17 17 17 17 17 17 17 1	Depth 2244 2275 2396 2397 2429 2480 2492	EPORT SHOW GAS DAT DURING UNITS 43 53 53 53 53 53 53 53 53 53 54 54 54 54 54 54 54 54 54 54 54 54 54	AAFTER UNIS 8 AAFTER UNIS 156.50 158.70 157.60 169.20 170.70 170.170 171.170 171.170 171.190	(gal)	Depth 3103 3165 3196 3226 3226 3227	Price River 2 Blackhawk 3 Ss 40%, Sh 3 Deviation 1.06 1.02 1.15 1.28 1.45 1.38	Azimuth 174.90 175.60 169.60 165.50 155.00	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31
MUD CIOUS CIU	Deviation 1.03 1.22 1.34 1.33 1.48	Azimuth 184.79 185.53 186.97 180.49 180.29 175.88 164.40 162.92 156.82	SHOW FROM (N) 3445 3515 0.78 0.78 0.21 0.88 0.28 0.36 0.89 0.12 0.88	Dep 140 143 148 149 153 156 159 162 165 168	th 17-7-7-7-7-7-7-7-7-7-7-7-7-7-7-7-7-7-7-	PATE: (ex.) RATE: (A) 111 16 0.69 0.75 0.73 0.34 0.51 0.83 0.65 0.81 1.20 1.00	Azimuth 190.80 190.50 201.30 201.30 194.00 194.00 198.70 202.10 202.10	MUD L TON AFTER (6) 5 17 DL Angle 1.35 0.39 0.47 0.43 1.08 1.13 0.29 0.43	OGGER R. Berone UNIS 8 18 18 2244 2275 2306 2307 2307 2307 2309 2429 2420 2490 2492 2523	EPORT SHOW GAS DAT DURING LINITS 43 53 53 53 53 54 55 55 55 55 55 55 55 55 55 55 55 55	Azimuth 147,80 156,50 157,60 163,20 170,70 170,10 171,70 171,190 171,190	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87 0.84	(ex) Ps: Intages: Idon: Depth 3103 3133 3165 3296 3226 3257 3288 3320	Deviation 1.06 1.02 1.15 1.28 1.45 1.38 1.40 1.40	Aximuth 174.90 175.60 174.00 167.30 169.50 155.00 152.50	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54
INTING INMINIORY IN TO A TO A TO A TO A TO A TO A TO A TO	Deviation 1.03 1.22 1.26 1.34 1.34 1.33	Azimuth 184.79 180.53 105.57 185.91 180.49 180.29 175.88 164.40 162.92	SHOW FROM (FROM 0.19 0.78 0.17 0.21 0.28 0.88 0.28 0.39 0.12 0.49 0.12 0.49 0.12 0.49 0.12 0.49 0.12 0.49 0.12	Dep 144 143 156 159 165 168 178	th. 177 188 8 8 9 9 2 2 1 3 3 3 5 5 6 6 7 7 8 3 8 3 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	PATE (%) 111 16 0.69 0.75 0.73 0.33 0.51 0.53 0.651 1.20 1.00 0.88	Azimuth 190.80 190.50 201.30 218.50 208.70 194.00 197.20 198.70 202.10 202.10 202.10 179.00	MUD L TON AFTER (b) 8 17 DEVIAN 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23	Depth 18 18 18 18 18 18 18 18 18 18 18 18 18	EPORT SHOW GAS DAY AS D	AFTER UNITS 8 AFTER 147.80 156.50 158.70 157.60 163.20 170.70 171.190 171.70 171.190 171.20	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07	Depth 3103 3165 3196 3226 3257 3288 3320 3350	Price River 2 Blackhawk 3 Ss 40%, Sh 3 Deviation 1.06 1.02 1.15 1.26 1.45 1.38 1.40 1.40 1.36	Azimuth 174.90 175.60 169.60 165.50 155.00	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79
MUDGEN PARTIES AND	Deviation 1.03 1.22 1.20 1.22 1.34 1.34 1.33 1.34 1.34 1.43	Astmuth 184.79 189.53 186.87 180.49 180.29 175.88 164.40 182.92 156.82 143.19	SHOW FROM (N) 3445 3515 0.78 0.78 0.21 0.88 0.28 0.36 0.89 0.12 0.88	Dep 140 143 153 156 159 162 165 168 172 175 175 175 175 175 175 175 175 175 175	th 17-16 18-16 1	Partition (8) 0.69 0.73 0.34 0.55 0.65 0.05 1.20 1.00 0.08 0.08 0.08 0.08 0.08 0.08 0.0	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 137.20 198.70 202.10 202.10 202.10 179.00 157.60	MUD L TION AFTER (b) 5 17 DL Angle 1.35 0.39 0.47 0.83 1.13 0.29 1.29 0.85 1.23 1.04	Depth 2244 2275 2306 2397 2449 2452 2553 2554	EPORT SHOW GAS DAY DURING UNITS 43 53 53 53 53 54 55 53 55 55 55 55 55 55 55 55 55 55 55	Azinuth. 147.80 156.50 158.70 170.70 171.90 171.90 171.80 163.70 170.80	Comparison Com	Depth 3103 3103 3193 3165 3196 3257 3286 3350 3361 33413 3443	Deviation 1.06 1.02 1.15 1.28 1.45 1.40 1.40 1.40 1.12	Azimuth 174.90 175.60 176.730 169.60 155.50 155.00 152.50 154.50	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54
MUDO CLAST 22 NO INVESTIGATION OF THE PROPERTY	Deviation 1.03 1.22 1.20 1.25 1.34 1.33 1.48 1.43 0.84	Azimuth 184.79 180.53 165.67 185.91 180.49 190.29 175.88 184.40 162.92 156.82 143.19 137.08	DL Angle 3445 3515 DL Angle 0.19 0.78 0.78 0.21 0.68 0.26 0.36 0.89 0.12 0.68	Dep 140 143 156 159 162 175 1765 1765 1765 1765 1765 1765 1765	sh (17) (18) (18) (18) (18) (18) (18) (18) (18	PATE: (ex.) RATE: (A) (A) 11 16 Deviation 0.69 0.75 0.73 0.34 0.51 0.81 1.100 0.885 0.81 1.100 0.886 0.93	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 197.20 198.70 202.10 202.10 179.00 157.60 164.00	MUD L TON AFTER (6) 5 17 DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 0.43	OGGER R berone unis 8 18 18 2244 2275 2308 2337 2367 2399 2429 2480 2492 2523 2553 2554 2614	EPORT SHOW GAS DATE OF THE PROPERTY OF THE PRO	A AFTER UNITS 8 AZIMUTH 147.80 156.50 158.70 157.60 163.20 170.70 170.10 171.70 171.20 170.90 163.70 157.40 163.70 157.40	(gal)	(ex) Depth 3103 3133 3196 3226 3226 3257 3257 3350 3350 3381 3413	Deviation 1.06 1.02 1.15 1.26 1.45 1.38 1.40 1.40 1.36 1.12 1.19	Azimuth 174.90 175.60 167.30 169.60 155.00 159.00 154.50 159.60	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79
UTING IMM WTONY IT ALL STATE LATE AND ALL STATE MUD CLAST 22 DAI INVESTIGATION MUD CLAST 22 D	Deviation 1.03 1.22 1.26 1.34 1.34 1.34 1.34 1.34 1.34 1.34 1.34	Azimuth 184.79 189.53 186.87 180.49 180.29 175.88 184.40 182.92 156.82 143.19 137.08 130.59	SHOW FROM (N) 3445 3515 0.19 0.76 0.19 0.21 0.88 0.28 0.36 0.89 0.12 0.86 1.28 0.51	Dep 140 143 153 156 159 162 165 168 172 175 175 175 175 175 175 175 175 175 175	th 77	PATE (%) 111 16 0.69 0.75 0.73 0.33 0.51 0.53 0.81 1.20 0.88 0.44 0.93	Azimuth 190.80 190.50 201.30 218.50 208.70 194.00 198.70 202.10 202.10 179.00 157.80 164.00 149.00	MUD L. RON (h) 8 17 DEVIAN DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.43 1.29 1.04 0.43 1.08	OGGER R BEFORE UNTS 8 18 18 2244 2275 2306 2397 2367 2399 2429 2460 2492 2523 2553 2584 2614	EPORT SHOW GAS DAY AND A SHOW GA	Azimuth 147.80 156.50 158.70 177.10 177.10 177.120 170.80 163.70 157.60 163.70 163.70	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.80 1.20	Depth 3103 3103 3193 3165 3196 3257 3286 3350 3361 33413 3443	Price River 2 Blackhawk 3 Ss 40%, Sh 3 Deviation 1.06 1.02 1.15 1.26 1.38 1.40 1.36 1.12 1.09 1.16	Aximuth 174.90 175.60 174.00 167.30 169.50 159.00 159.00 152.50 159.00 159.00 159.00 159.00 159.00 159.00	DL Angle DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
INTING INM INTONY IN LAST 22 L	Deviation 1.03 1.22 1.26 1.32 1.34 1.33 1.48 1.43 0.71 0.86 0.50 0.91	Azimuth 184.79 185.53 186.91 180.49 180.29 175.88 184.40 182.92 156.82 143.19 137.08 130.59 112.05 107.94 109.50	SHOW FROM (4) 3445 3515 0.19 0.76 0.19 0.21 0.88 0.29 0.12 0.88 1.29 0.51 0.95 1.04 0.65	C C C C C C C C C C	th 177 13 3 3 9 9 2 2 3 3 3 5 6 6 7 7 3 3 0 1 1 2 2 3 3 3 3 3 5 6 6 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	PATE: (ex.) RATE: (A) (A) 11 16 Deviation 0.69 0.75 0.73 0.34 0.51 0.81 1.100 0.885 0.81 1.100 0.886 0.93	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 198.70 202.10 202.10 179.00 157.60 164.00 149.00	MUD L TION AFTER (h) 6 17 DL Angle 1,35 0,39 0,47 0,83 1,13 0,29 0,65 1,23 1,04 0,43 1,04 0,43 1,06 0,59	Depth 2244 2275 2399 2429 2492 2523 2534 2614 2624 2672	EPORT SHOW GAS DAY DURING LINTS 43 53 53 53 53 54 55 53 55 55 55 55 55 55 55 55 55 55 55	Azimuth 147.80 156.50 158.70 157.60 170.70 171.10 171.20 170.60 183.70 157.40 165.40 163.70	Comparison Com	Depth 3103 3103 3193 3165 3196 3257 3286 3350 3361 33413 3443	Price River 2 Blackhawk 3 Ss 40%, Sh 3 Deviation 1.06 1.02 1.15 1.26 1.38 1.40 1.36 1.12 1.09 1.16	Aximuth 174.90 175.60 174.00 167.30 169.50 159.00 159.00 152.50 159.00 159.00 159.00 159.00 159.00 159.00	DL Angle DL 96 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
MUDDLAST 22 DLAST 22	Deviation 1.03 1.22 1.20 1.22 1.20 1.34 1.34 1.33 1.34 1.34 1.33 1.34 1.36 1.31 1.36 1.31 1.31 1.32 1.31 1.32 1.32 1.33 1.34 1.35 1.35 1.36 1.30 1.31 1.31 1.32 1.33 1.34 1.35 1.35 1.36 1.36 1.36 1.37 1.38 1.48 1.43 1.43	Azimuth 184.79 189.53 186.87 188.91 180.49 180.29 175.88 164.40 162.92 156.82 143.19 137.08 130.59 112.65 107.94 109.50 120.10	SHOW FROM 120 120 120 120 120 120 120 120 120 120	Dep 143 148 148 149 153 156 165 165 173 173 1812 1842 1841 1841 1851 1851 1851 1851 1851 1851	th. 77 18 8 8 9 9 2 2 3 3 3 3 5 6 6 7 7 7 8 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9	Parter BEFORE (A) 111 16 16 17 17 18 18 18 18 18 18 18 18 18 18 18 18 18	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 198.70 202.10 202.10 179.00 157.60 164.00 149.00 158.00	MUD L TON AFTER (6) 8 17 DL Angle 1,35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 0.43 1.06 0.59 0.59 0.50	OGGER R berone unis 8 18 18 2244 2275 2308 2337 2367 2399 2429 2480 2492 2523 2553 2554 2614 2644 2672 2703	EPORT SHOW GAS DAT DATE: 43 53 SVEYS Deviation 2:27 2:24 2:05 1:95 1:48 1:22 0:96 0:91 1:23 1:10 1:30 1:60 1:55	Azimuth 147.80 156.50 158.70 170.70 170.10 171.70 170.10 171.20 170.60 163.70 163.70 163.70 163.70 163.70	Formation To	Depth 3103 3103 3193 3165 3196 3257 3286 3350 3361 33413 3443	Price River 2 Blackhawk 3 Ss 40%, Sh 3 Deviation 1.06 1.02 1.15 1.26 1.38 1.40 1.36 1.12 1.09 1.16	Aximuth 174.90 175.60 174.00 167.30 169.50 159.00 159.00 152.50 159.00 159.00 159.00 159.00 159.00 159.00	DL Angle DL 96 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
MUDUATE 2 MUDUCUS COLOR MUDUCUS COLOR MUDUCUS COLOR MUDUCUS COLOR MUDUCUS COLOR MUDUS COLO	Deviation Gas Data (in the control of the control	Asimuth 194.79 180.39 180.29 175.88 184.40 182.92 156.82 143.19 137.08 130.59 112.65 107.94 109.50 120.10 126.70	DL Angle 3445 3515 DL Angle 0.19 0.78 0.78 0.21 0.68 0.26 0.86 0.92 0.68 1.29 0.65 1.04 0.65 0.65 0.82	C C C C C C C C C C	bb. 119	PATE: BEFORE (A) 111 16 16 17 16 17 16 17 16 17 17 16 17 17 17 17 17 17 17 17 17 17 17 17 17	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 198.70 202.10 202.10 179.00 157.60 164.00 149.00	MUD L TION AFTER (h) 6 17 DL Angle 1,35 0,39 0,47 0,83 1,13 0,29 0,65 1,23 1,04 0,43 1,04 0,43 1,06 0,59	OGGER R BEFORE UNTS 8 18 18 2244 2275 2306 2399 2449 2429 2460 2492 2523 2553 2554 2614 2614 2672 2703	EPORT SHOW 20AS DAY DAY SHOW 20AS DAY 2	Azimuth. 147.80 156.50 153.70 170.10 171.70 171.90 171.90 171.20 170.60 163.70 163.70 165.40 163.70 165.40 163.70	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.80 1.20 0.18 0.48 1.02	Depth 3103 3103 3193 3165 3196 3257 3286 3350 3361 33413 3443	Price River 2 Blackhawk 3 Ss 40%, Sh 3 Deviation 1.06 1.02 1.15 1.26 1.38 1.40 1.36 1.12 1.09 1.16	Aximuth 174.90 175.60 174.00 167.30 169.50 159.00 159.00 152.50 159.00 159.00 159.00 159.00 159.00 159.00	DL Angle DL 96 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
INTING INM INTONY IN LAST 22 L	Deviation 1.03 1.22 1.34 1.32 1.34 1.33 1.48 1.43 0.71 0.86 0.50 0.91 1.00 1.00 1.00	Azimuth 184.79 185.83 186.87 180.99 175.88 184.40 180.29 175.88 184.40 180.29 175.88 130.59 112.65 107.94 109.50 120.10	SHOW FROM (4) 3445 3515 0.19 0.76 0.19 0.21 0.88 0.29 0.12 0.88 1.29 0.51 0.95 1.04 0.65 0.65 0.62 0.40 0.53	Dep 1440 143 153 1566 159 162 172 175 1764 1815 1844 1877 1998 1935 1967 1935 1967	th 77 88 8 9 9 2 2 3 3 3 3 5 6 6 7 7 7 3 3 0 1 1 2 3 3 1 1 2 3 3 1 1 2 3 3 1 1 2 3 3 1 1 2 3 3 1 1 2 3 3 1 1 2 3 3 1 1 2 3 3 1 1 2 3 3 1 1 2 3 3 1 1 1 2 3 3 1 1 1 2 3 3 1 1 1 2 3 3 1 1 1 2 3 3 1 1 1 2 3 3 1 1 1 2 3 3 1 1 1 2 3 3 1 1 1 2 3 3 1 1 1 2 3 3 1 1 1 2 3 3 1 1 1 2 3 3 1 1 1 2 3 3 1 1 1 2 3 3 1 1 1 2 3 3 1 1 1 1	Paylation (A) (A) (A) (A) (A) (A) (A) (A) (A) (A)	Azimuth 190.80 190.50 201.30 218.50 208.70 194.00 187.20 198.70 202.10 202.10 179.00 149.00 149.00 149.00 149.00 158.00 146.50 152.00	MUD L. RON	OGGER R berone unis 8 18 18 2244 2275 2308 2337 2367 2399 2429 2480 2492 2523 2553 2554 2614 2644 2672 2703	EPORT SHOW GAS DAT DATE: 43 53 SVEYS Deviation 2:27 2:24 2:05 1:95 1:48 1:22 0:96 0:91 1:23 1:10 1:30 1:60 1:55	Azimuth 147.80 156.50 158.70 157.60 170.70 171.90 171.20 177.40 163.70 168.10 177.10 177.80	DL Angle Sample Descrip DL Angle O.66 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.30 1.20 0.18 0.48 1.02 0.25	Depth 3103 3103 3193 3165 3196 3257 3286 3350 3361 33413 3443	Price River 2 Blackhawk 3 Ss 40%, Sh 3 Deviation 1.06 1.02 1.15 1.26 1.38 1.40 1.36 1.12 1.09 1.16	Aximuth 174.90 175.60 174.00 167.30 169.50 159.00 159.00 152.50 159.00 159.00 159.00 159.00 159.00 159.00	DL Angle DL 96 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
MUDDAY R. W. M. M. M. M. M. M. M. M. M. M. M. M. M.	Deviation 1.03 1.22 1.20 1.22 1.20 1.22 1.20 1.34 1.36 1.34 1.33 1.48 1.43 0.84 0.71 0.86 0.50 0.91	Azimuth 184.79 189.53 180.49 180.49 180.29 175.88 184.40 182.92 156.62 143.19 137.08 130.59 112.65 107.94 109.50 120.10 126.70 132.57 137.30	SHOW FROM (R) 3445 3515 0.19 0.78 0.27 0.21 0.88 0.26 0.39 0.12 0.85 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.33	C C C C C C C C C C	th 77 88 8 9 9 2 2 3 3 3 3 5 6 6 7 7 7 3 3 0 1 1 2 3 3 1 1 2 3 3 1 1 2 3 3 1 1 2 3 3 1 1 2 3 3 1 1 2 3 3 1 1 2 3 3 1 1 2 3 3 1 1 2 3 3 1 1 2 3 3 1 1 1 2 3 3 1 1 1 2 3 3 1 1 1 2 3 3 1 1 1 2 3 3 1 1 1 2 3 3 1 1 1 2 3 3 1 1 1 2 3 3 1 1 1 2 3 3 1 1 1 2 3 3 1 1 1 2 3 3 1 1 1 2 3 3 1 1 1 2 3 3 1 1 1 2 3 3 1 1 1 2 3 3 1 1 1 1	PATE: (8) Paylation 0.69 0.75 0.73 0.34 0.51 0.33 0.81 1.20 1.00 0.88 0.44 0.93 1.12 1.05 1.15 1.16 1.30 1.75	Azimuth 190.60 190.50 201.30 218.50 218.50 198.70 202.10 179.00 157.60 164.00 146.50 152.00 155.00	MUD L MOD L TON AFTER (h) 8 17 17 DL Angle 1.35 0.39 0.47 0.43 1.08 1.13 0.29 0.65 1.29 0.65 1.29 0.65 1.04 0.43 1.06 0.59 0.63 0.59 0.63 0.59	Depth 18 18 18 18 18 18 18 18 18 18 18 18 18	EPORT SHOW GAS DAY DURING LANTS 43 53 53 53 53 53 54 55 53 55 55 55 55 55 55 55 55 55 55 55	A AFTER LNTS 8 AZINUTH 147.80 156.50 158.70 170.70 170.10 171.70 170.10 171.20 163.70	Formation To	Depth 3103 3103 3193 3165 3196 3257 3286 3350 3361 33413 3443	Price River 2 Blackhawk 3 Ss 40%, Sh 3 Deviation 1.06 1.02 1.15 1.26 1.38 1.40 1.36 1.12 1.09 1.16	Aximuth 174.90 175.60 174.00 167.30 169.50 159.00 159.00 152.50 159.00 159.00 159.00 159.00 159.00 159.00	DL Angle DL 96 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
MUDUANT 2 MUDUAN	Deviation O GAS DATA (In Mularive Cost MUD COST O GAS DATA (In Mularive Cost O GAS DATA (In M	Asimuth 194.79 186.87 186.87 186.87 186.81 180.49 180.29 175.88 184.40 162.92 156.82 143.19 137.08 130.59 112.65 107.94 109.50 120.10 120.10 120.17 132.57 137.30	DL Angle 3445 3515 DL Angle 0.19 0.78 0.78 0.21 0.68 0.26 0.99 1.29 0.68 1.29 0.65 0.91 0.65 0.65 0.65 0.65 0.63	C C C C C C C C C C	bh 177 178 188 189 199 199 199 199 199 199 199 19	RATE: BEFORE (A) 11 16 0.69 0.75 0.73 0.64 0.51 1.00 0.83 0.85 0.81 1.20 1.00 1.00 0.84 0.93 1.12 1.05 1.18 1.19 1.19 1.19 1.19 1.19 1.19 1.19	Azimuth 190.60 190.50 201.30 218.50 206.70 194.00 187.20 198.70 202.10 202.10 179.00 157.60 164.00 1149.00 156.00 1150.00	MUD L TRON AFTER (b) 8 17 DL Angle 1.13 0.39 0.47 0.83 1.08 1.12 0.65 1.23 1.04 0.43 1.09 0.59 0.63 0.59 0.50 0.50 0.50 0.39 1.12	Depth 18 18 18 18 18 18 18 18 18 18 18 18 18	EPORT SHOW GAS DAT DATE: 43 53 53 EVEYS Deviation 2 27 2 24 2 0 96 2 0 5 1 95 1 148 1 122 0 96 0 .91 1 130 1 160 1 153 1 160 1 155 1 166 1 182 1 177 1 130	Azimuth 147.80 156.50 158.70 157.60 170.70 171.90 171.20 177.40 163.70 168.10 177.10 177.80	DL Angle Sample Descrip DL Angle O.66 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.30 1.20 0.18 0.48 1.02 0.25	Depth 3103 3103 3193 3165 3196 3257 3286 3350 3361 33413 3443	Price River 2 Blackhawk 3 Ss 40%, Sh 3 Deviation 1.06 1.02 1.15 1.26 1.38 1.40 1.36 1.12 1.09 1.16	Aximuth 174.90 175.60 174.00 167.30 169.50 159.00 159.00 152.50 159.00 159.00 159.00 159.00 159.00 159.00	DL Angle DL 96 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
INTING INM INTONY IN LAST 22 L	Deviation 1.03 1.22 1.20 1.22 1.20 1.22 1.20 1.34 1.36 1.34 1.33 1.48 1.43 0.84 0.71 0.86 0.50 0.91	Azimuth 184.79 189.53 166.87 180.49 180.29 175.88 184.40 182.92 156.82 143.19 137.08 130.59 112.65 107.94 109.50 120.10 126.70 132.57 137.30 141.51	SHOW FROM (N) 3445 3515 3515 3515 3515 361	Dep 1440 143 153 1566 159 162 172 1755 1763 1935 1947 1997 1997 1997 2028 2060	bh 177 178 188 189 199 199 199 199 199 199 199 19	Paylation (6) (6) (7) (7) (7) (7) (7) (7) (7) (7) (7) (7	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 198.70 202.10 202.10 179.00 157.60 164.00 149.00 158.00 155.60 164.00 158.00 156.00 156.00 158.00 158.00 156.00 158.00	MUD L TON AFTER (6) 8 17 DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.65 1.23 1.06 0.43 1.09 0.65 1.23 1.06 0.59 0.65 1.23 1.06 0.59 0.63 0.54 1.59 0.50 0.39 1.12	OGGER R berone unis 8 18 18 18 2244 2275 2308 2337 2367 2399 2429 2480 2492 2523 2553 2554 2614 2644 2672 2703 2734 2764 2826 2856 2857 2819	EPORT SHOW GAS DAT DURING LINITS 43 53 53 53 53 53 53 53 54 54 55 55 55 55 55 55 55 55 55 55 55	Azimuth 147.80 156.50 158.70 170.70 170.10 171.70 170.10 171.20 170.60 163.70 163.70 163.70 177.90 178.90 185.40 163.70 177.10 177.10 177.10 177.10 178.90 185.40 165.70 185.40 165.70 185.10 195.10 195.10	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.84 0.01 0.17 1.07 0.62 0.80 1.20 0.18 0.48 1.02 0.25 0.79 0.94	Depth 3103 3103 3193 3165 3196 3257 3286 3350 3361 33413 3443	Price River 2 Blackhawk 3 Ss 40%, Sh 3 Deviation 1.06 1.02 1.15 1.26 1.38 1.40 1.36 1.12 1.09 1.16	Aximuth 174.90 175.60 174.00 167.30 169.50 159.00 159.00 152.50 159.00 159.00 159.00 159.00 159.00 159.00	DL Angle DL 96 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
MUDDAY 2 DAST 2	Deviation 1.03 1.22 1.20 1.25 1.34 1.33 1.48 1.43 0.71 0.86 0.50 0.91 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Azimuth 184.79 185.53 186.87 186.87 186.91 190.49 197.5.88 194.40 192.92 195.82 143.19 137.08 130.59 112.65 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75	SHOW FROM (R) 3445 3515 0.19 0.78 0.27 0.21 0.88 0.26 0.39 0.12 0.65 0.62 0.40 0.53 0.33 0.62 1.43 2.30	C C C C C C C C C C	bh 177 178 188 189 199 199 199 199 199 199 199 19	PATE (8) PEFORE (8) 111 16 0.69 0.75 0.73 0.34 0.51 0.83 1.20 1.00 0.88 0.44 0.93 1.12 1.05 1.11 1.18 1.30 1.75 1.75 1.75 1.75 1.70 1.61 1.91	Azimuth 190.80 190.80 190.50 201.30 218.50 208.70 194.00 187.20 188.70 202.10 202.10 179.00 149.00 149.00 158.00 149.00 158.00 146.50 158.00	MUD L. RON ATTER (8) 8 17 DL Angle 1.35 0.39 0.47 0.43 1.08 1.13 0.29 0.43 1.04 0.50 0.50 0.50 0.59 0.50 0.39 1.12 1.05	Depth SUF Depth Super Su	EPORT SHOW GAS DAY DAY BY SHOW GAS DAY CAN'TS A 3 53 53 53 53 53 53 54 55 54 55 55 55 55 55 55 55 55 55 55	AFTER LN15 8 AFTER LN15 8 AZIMUth 147.80 156.50 158.70 157.60 170.170 171.70 171.70 171.70 171.90 177.10 173.70 163.70 163.70 163.70 163.70 163.10 177.10 178.90 184.00 196.10 191.00 205.80 221.40	DL Angle Sample Descrip DL Angle O.66 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.30 1.20 0.18 0.48 1.02 0.25 0.79 0.94 1.01	Depth 3103 3103 3193 3165 3196 3257 3286 3350 3361 33413 3443	Price River 2 Blackhawk 3 Ss 40%, Sh 3 Deviation 1.06 1.02 1.15 1.26 1.38 1.40 1.36 1.12 1.09 1.16	Aximuth 174.90 175.60 174.00 167.30 169.50 159.00 159.00 152.50 159.00 159.00 159.00 159.00 159.00 159.00	DL Angle DL 96 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
MUDUANT 2 MANUAL	Deviation 1.03 1.22 1.20 1.22 1.20 1.22 1.20 1.22 1.20 1.22 1.20 1.34 1.36 1.34 1.36 1.39 1.39 1.39 1.39 1.39 1.39 1.39 1.39	Azimuth 184.79 189.53 166.87 180.49 180.29 175.88 184.40 182.92 156.82 143.19 137.08 130.59 112.65 107.94 109.50 120.10 126.70 132.57 137.30 141.51	DL Angle SHOW FROM (N) 3445 3515 DL Angle 0.19 0.78 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.68 1.29 0.86 1.29 0.85 0.91 0.65 0.82 0.91 0.85 0.91 0.95 0.92 0.88 0.91 0.95 0.92 0.98 0.99 0.99 0.99 0.99 0.99 0.99 0.99	C C C C C C C C C C	bh 177 178 188 189 189 189 189 189 189 189 189 18	PATE: SEFORE (A) 111 16 16 17 16 17 16 17 17 16 17 17 17 17 17 18 1.38 1.95 1.74	Azimuth 190.60 190.50 201.30 218.50 206.70 194.00 187.20 198.70 202.10 202.10 179.00 157.60 164.00 146.50 155.00 156.00 151.50 164.00 155.00 158.40 164.20 158.40 164.20	MUD L TION AFTER (b) 8 17 DE Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.09 0.65 1.23 1.04 0.43 1.29 0.65 1.23 1.04 0.43 1.29 0.65 0.50 0.50 0.50 0.50 0.39 1.12 1.05 0.26 1.03	Depth 2244 2275 2396 2397 2367 2399 2450 2450 2553 2554 2614 2672 2703 2734 2764 2226 2256 2257 2951 2951	EPORT SHOW GAS DAY DURING LINES 43 53 53 53 53 53 53 53 54 55 54 55 55 55 55 55 55 55 55 55 55	AAFTER UNTS 8 AAFTER UNTS 8 147.80 156.50 158.70 158.70 170.10 171.70 171.90 171.70 171.90 163.70 165.40 163.70 165.40 163.70 165.40 163.70 165.40 163.70 165.40 163.70 165.40 163.70 165.40 163.70 165.40 163.70 165.40 163.70 165.40 163.70 165.40 163.70 165.40 163.70 165.40 163.70 165.40 163.70 165.80 224.40 224.40	Formation To	Depth 3103 3103 3193 3165 3196 3257 3286 3350 3361 33413 3443	Price River 2 Blackhawk 3 Ss 40%, Sh 3 Deviation 1.06 1.02 1.15 1.26 1.38 1.40 1.36 1.12 1.09 1.16	Aximuth 174.90 175.60 174.00 167.30 169.50 159.00 159.00 152.50 159.00 159.00 159.00 159.00 159.00 159.00	DL Angle DL 96 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
MUDUANT 2 MANUAL	Deviation O GAS DATA (In Mularive Cost MUD COST O GAS DATA (In Mularive Cost O GAS DATA (In	Asimuth 194.79 180.39 180.29 175.88 184.40 182.92 156.82 143.19 137.08 130.59 112.65 107.94 109.50 120.10 120.10 120.70 132.57 137.30 137.30 137.30	SHOW FROM (R) 3445 3515 0.19 0.78 0.27 0.21 0.88 0.26 0.39 0.12 0.65 0.62 0.40 0.53 0.33 0.62 1.43 2.30	Deprival. 1	th 17 18 18 19 19 19 19 19 19	PATE: BEFORE (A) 111 16 16 17 16 17 16 17 17 17 17 17 17 17 17 17 17 17 17 17	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 198.70 202.10 202.10 179.00 157.60 164.00 149.00 155.60 164.00 156.00 156.00 156.00 158.40 164.20 154.10 155.20	MUD L. TON AFTER (b) 8 17 DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.65 1.23 1.06 0.43 1.09 0.65 1.23 1.06 0.59 0.65 1.23 1.06 0.59 0.83 0.54 1.59 0.83 0.54 1.59 0.80 0.99 1.12 1.05 0.86	OGGER R berone unis 8 18 18 18 2244 2275 2308 2337 2367 2399 2429 2480 2492 2523 2553 2554 2614 2644 2672 2703 2734 2764 2826 2856 2857 2819 2851 28911	EPORT SHOW GAS DAT DURING LINITS 43 53 53 53 53 53 53 53 54 54 55 55 55 55 55 55 55 55 55 55 55	Azimuth 147.80 156.50 158.70 170.70 170.10 171.70 170.10 171.20 170.60 163.70 157.40 163.70 157.40 163.70 177.70 170.10 171.70 171.90 171.20 171.20 171.20 171.20 170.50 163.70 1	Formation To	Depth 3103 3103 3193 3165 3196 3257 3286 3350 3361 33413 3443	Price River 2 Blackhawk 3 Ss 40%, Sh 3 Deviation 1.06 1.02 1.15 1.26 1.38 1.40 1.36 1.12 1.09 1.16	Aximuth 174.90 175.60 174.00 167.30 169.50 159.00 159.00 152.50 159.00 159.00 159.00 159.00 159.00 159.00	DL Angle DL 96 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
MUDDAST 22 DAST 24 DAST 25 DAST 25 DAST 25 DAST 25 DAST 25 DAST 26 DAS	Deviation 1.03 1.22 1.20 1.25 1.34 1.33 1.48 1.43 0.71 0.86 0.50 0.91 1.00 1.06 1.07 0.91	Azimuth 184.79 189.53 180.49 180.49 180.49 180.29 175.88 164.40 182.92 156.82 143.19 137.08 130.59 112.65 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75 203.90	SHOW FROM (4) 3445 3515 10 10 10 10 10 10 10	C C C C C C C C C C	19 19 15 19 19 19 19 19 19 19 19 19 19 19 19 19	PATE (8) PATE (8) PATE (9) PATE (Azimuth 190.80 190.80 190.80 201.30 218.50 208.70 194.00 187.20 188.70 202.10 202.10 179.00 157.60 164.00 149.00 158.00 146.50 155.00 161.00 158.40 164.20 155.20 164.80	MUD L. RON (s) 8 177 DEVIAN 1.35 0.39 0.47 0.83 1.08 1.13 1.08 1.23 1.04 0.43 1.29 0.65 1.23 1.04 0.43 1.08 0.59 0.50 0.39 1.12 1.05 0.50 0.39 1.12 1.05 0.50 0.39 1.12 1.05 0.26 1.03 0.86 0.13 0.86 0.13	OGGER R. BEFORE UNTS 8 18 18 2244 2275 2306 2397 2367 2399 2449 2429 2440 2492 2523 2553 2564 2614 2672 2703 2734 2764 2826 2837 2919 2951 2981 3013 3014	EPORT SHOW GAS DAT DURING LATES 43 53 53 53 53 53 53 53 54 55 54 55 55 55 55 55 55 55 55 55 55	AFTER LN15 B AZIMUTh 147.80 156.50 158.70 157.60 163.20 170.70 171.90 171.70 171.90 171.70 171.90 171.70 171.90 171.70 171.90 183.70 185.40 183.70 186.40 187.70 188.10 187.10 188.10 177.10 178.90 184.00 196.10 191.00 224.80 225.50 226.00	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.84 0.01 0.17 1.07 0.62 0.80 1.20 0.18 0.48 1.02 0.25 0.79 0.94 1.01 0.72 0.72 0.78 0.56 1.18 1.03 0.78	Depth 3103 3103 3193 3165 3196 3257 3286 3350 3361 33413 3443	Price River 2 Blackhawk 3 Ss 40%, Sh 3 Deviation 1.06 1.02 1.15 1.26 1.38 1.40 1.36 1.12 1.09 1.16	Aximuth 174.90 175.60 174.00 167.30 169.50 159.00 159.00 152.50 159.00 159.00 159.00 159.00 159.00 159.00	DL Angle DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
MUDDAN PARAMETER	Deviation 1.03 1.22 1.20 1.22 1.20 1.22 1.20 1.22 1.20 1.22 1.20 1.22 1.20 1.25 1.34 1.48 1.43 0.84 1.43 0.84 1.43 0.81 1.48 1.43 0.81 1.48 1.43 0.81 1.48 1.48 1.49 0.71 0.86 0.50 0.91 1.00 1.01 0.76 0.97 0.30 0.35 0.35 0.34	Azimuth 184.79 185.53 186.87 188.91 180.29 175.88 164.40 162.92 175.88 164.40 162.92 175.87 180.29 175.87 180.29 175.88 164.70 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75 203.90 1773.03	SHOW FROM (t) 3445 3515 0.19 0.78 0.17 0.21 0.88 0.88 0.26 0.89 0.12 0.88 0.51 0.95 1.04 0.65 0.62 0.40 0.65 0.62 0.40 0.53 0.51 0.51 0.51 0.51 0.52 0.51 0.55 0.62	Deprival. 1	19 19 15 19 19 19 19 19 19 19 19 19 19 19 19 19	PATE (8) PATE (8) PATE (9) PATE (Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 198.70 202.10 202.10 179.00 157.60 164.00 149.00 155.60 164.00 156.00 156.00 156.00 158.40 164.20 154.10 155.20	MUD L. TON AFTER (b) 8 17 DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.65 1.23 1.06 0.43 1.09 0.65 1.23 1.06 0.59 0.65 1.23 1.06 0.59 0.83 0.54 1.59 0.83 0.54 1.59 0.80 0.99 1.12 1.05 0.86	OGGER R berone unis 8 18 18 18 2244 2275 2308 2337 2367 2399 2429 2480 2492 2523 2553 2554 2614 2644 2672 2703 2734 2764 2826 2856 2857 2819 2851 28911	EPORT SHOW GAS DAT DURING LATES 43 53 53 53 53 53 53 53 54 55 54 55 55 55 55 55 55 55 55 55 55	Azimuth 147.80 156.50 158.70 170.70 170.10 171.70 170.10 171.20 170.60 163.70 157.40 163.70 157.40 163.70 177.70 170.10 171.70 171.90 171.20 171.20 171.20 171.20 170.50 163.70 1	Formation To	Depth 3103 3103 3193 3165 3196 3257 3286 3350 3361 33413 3443	Price River 2 Blackhawk 3 Ss 40%, Sh 3 Deviation 1.06 1.02 1.15 1.26 1.38 1.40 1.36 1.12 1.09 1.16	Aximuth 174.90 175.60 174.00 167.30 169.50 159.00 159.00 152.50 159.00 159.00 159.00 159.00 159.00 159.00	DL Angle DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
RTING IMM NTORY R D LAST 20 NG INVER Y MUD CO JIOUS CU ULATIVE MUD NACK COUND	Deviation 1.03 1.22 1.20 1.22 1.20 1.22 1.20 1.22 1.20 1.22 1.20 1.22 1.20 1.25 1.34 1.48 1.43 0.84 1.43 0.84 1.43 0.81 1.48 1.43 0.81 1.48 1.43 0.81 1.48 1.48 1.49 0.71 0.86 0.50 0.91 1.00 1.01 0.76 0.97 0.30 0.35 0.35 0.34	Azimuth 184.79 185.53 186.87 188.91 180.29 175.88 164.40 162.92 175.88 164.40 162.92 175.87 180.29 175.87 180.29 175.88 164.70 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75 203.90 1773.03	SHOW FROM (t) 3445 3515 0.19 0.78 0.17 0.21 0.88 0.88 0.26 0.89 0.12 0.88 0.51 0.95 1.04 0.65 0.62 0.40 0.65 0.62 0.40 0.53 0.51 0.51 0.51 0.51 0.52 0.51 0.55 0.62	C C C C C C C C C C	19 19 15 19 19 19 19 19 19 19 19 19 19 19 19 19	PATE (8) PATE (8) PATE (9) PATE (Azimuth 190.80 190.80 190.80 201.30 218.50 208.70 194.00 187.20 188.70 202.10 202.10 179.00 157.60 164.00 149.00 158.00 146.50 155.00 161.00 158.40 164.20 155.20 164.80	MUD L. RON (s) 8 177 DEVIAN 1.35 0.39 0.47 0.83 1.08 1.13 1.08 1.23 1.04 0.43 1.29 0.65 1.23 1.04 0.43 1.08 0.59 0.50 0.39 1.12 1.05 0.50 0.39 1.12 1.05 0.50 0.39 1.12 1.05 0.26 1.03 0.86 0.13 0.86 0.13	OGGER R. BEFORE UNTS 8 18 18 2244 2275 2306 2397 2367 2399 2449 2429 2440 2492 2523 2553 2564 2614 2672 2703 2734 2764 2826 2837 2919 2951 2981 3013 3014	EPORT SHOW GAS DAT DURING LATES 43 53 53 53 53 53 53 53 54 55 54 55 55 55 55 55 55 55 55 55 55	AFTER LN15 B AZIMUTh 147.80 156.50 158.70 157.60 163.20 170.70 171.90 171.70 171.90 171.70 171.90 171.70 171.90 171.70 171.90 183.70 185.40 183.70 186.40 187.70 188.10 187.10 188.10 177.10 178.90 184.00 196.10 191.00 224.80 225.50 226.00	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.84 0.01 0.17 1.07 0.62 0.80 1.20 0.18 0.48 1.02 0.25 0.79 0.94 1.01 0.72 0.72 0.78 0.56 1.18 1.03 0.78	Depth 3103 3103 3193 3165 3196 3257 3286 3350 3361 33413 3443	Price River 2 Blackhawk 3 Ss 40%, Sh 3 Deviation 1.06 1.02 1.15 1.26 1.38 1.40 1.36 1.12 1.09 1.16	Aximuth 174.90 175.60 174.00 167.30 169.50 159.00 159.00 152.50 159.00 159.00 159.00 159.00 159.00 159.00	DL Angle DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
MUDDAST 22 DAST 24 DAST 25 DAST 25 DAST 25 DAST 25 DAST 25 DAST 26 DAS	Deviation 1.03 1.22 1.20 1.22 1.20 1.22 1.20 1.22 1.20 1.22 1.20 1.22 1.20 1.25 1.34 1.48 1.43 0.84 1.43 0.84 1.43 0.81 1.48 1.43 0.81 1.48 1.43 0.81 1.48 1.48 1.49 0.71 0.86 0.50 0.91 1.00 1.01 0.76 0.97 0.30 0.35 0.35 0.34	Azimuth 184.79 185.53 186.87 188.91 180.29 175.88 164.40 162.92 175.88 164.40 162.92 175.87 180.29 175.87 180.29 175.88 164.70 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75 203.90 1773.03	SHOW FROM (t) 3445 3515 0.19 0.78 0.17 0.21 0.88 0.88 0.26 0.89 0.12 0.88 0.51 0.95 1.04 0.65 0.62 0.40 0.65 0.62 0.40 0.53 0.51 0.51 0.51 0.51 0.52 0.51 0.55 0.62	C C C C C C C C C C	19 19 15 19 19 19 19 19 19 19 19 19 19 19 19 19	PATE (8) PATE (8) PATE (9) PATE (Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 198.70 202.10 202.10 179.00 157.60 164.00 149.00 155.00 161.00 158.00 161.00 158.00 161.00 158.00 161.00 158.00 161.00 158.00 161.00 158.00 161.00 158.00 161.00 158.00 161.00 158.00 161.00 158.00 158.00 161.00 158.00	MUD L TION 8 177 DEVIATOR 1,35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.13 0.29 0.65 1.23 1.06 0.59 0.83 0.54 1.59 0.50 0.39 1.12 1.05 0.26 0.13 1.05 0.26 0.13 1.05	OGGER R berone unis 8 18 18 18 2244 2275 2308 2337 2367 2399 2429 2480 2492 2523 2553 2554 2614 2644 2672 2703 2734 2764 2026 2056 2056 2057 2019 2019 2019 2019 2019 2019 2019 2019	EPORT SHOW GAS DAT DATE OF THE PROPERTY OF THE	AFTER LN15 B AZIMUTh 147.80 156.50 158.70 157.60 163.20 170.70 171.90 171.70 171.90 171.70 171.90 171.70 171.90 171.70 171.90 183.70 185.40 183.70 186.40 187.70 188.10 187.10 188.10 177.10 178.90 184.00 196.10 191.00 224.80 225.50 226.00	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.84 0.01 0.17 1.07 0.62 0.80 1.20 0.18 0.48 1.02 0.25 0.79 0.94 1.01 0.72 0.72 0.78 0.56 1.18 1.03 0.78	Depth 3103 3103 3193 3165 3196 3257 3286 3350 3361 33413 3443	Price River 2 Blackhawk 3 Ss 40%, Sh 3 Deviation 1.06 1.02 1.15 1.26 1.38 1.40 1.36 1.12 1.09 1.16	Aximuth 174.90 175.60 174.00 167.30 169.50 159.00 159.00 152.50 159.00 159.00 159.00 159.00 159.00 159.00	DL Angle DL 96 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
### ### ### ### ### ### ### ### ### ##	Deviation 1.03 1.22 1.20 1.22 1.20 1.22 1.20 1.22 1.20 1.22 1.20 1.22 1.20 1.25 1.34 1.48 1.43 0.84 1.43 0.84 1.43 0.81 1.48 1.43 0.81 1.48 1.43 0.81 1.48 1.48 1.49 0.71 0.86 0.50 0.91 1.00 1.01 0.76 0.97 0.30 0.35 0.35 0.34	Azimuth 184.79 185.53 186.87 188.91 180.29 175.88 164.40 162.92 175.88 164.40 162.92 175.87 180.29 175.87 180.29 175.88 164.70 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75 203.90 1773.03	SHOW FROM (t) 3445 3515 0.19 0.78 0.17 0.21 0.88 0.88 0.26 0.89 0.12 0.88 0.51 0.95 1.04 0.65 0.62 0.40 0.65 0.62 0.40 0.53 0.51 0.51 0.51 0.51 0.52 0.51 0.55 0.62	C C C C C C C C C C	th 77 18 8 8 9 9 2 2 3 3 3 5 6 6 7 7 7 3 3 0 1 1 2 3 3 1 1 2 3 3 1 1 2 3 3 1 1 2 3 3 1 1 2 3 3 1 1 2 3 3 1 1 2 3 3 1 1 2 3 3 1 1 2 3 3 1 1 1 2 3 3 1 1 1 2 3 3 1 1 1 2 3 3 1 1 1 2 3 3 1 1 1 2 3 3 1 1 1 2 3 3 1 1 1 2 3 3 1 1 1 2 3 3 1 1 1 2 3 3 1 1 1 2 3 3 1 1 1 2 3 3 1 1 1 1	PATE: BEFORE (A) 111 16 (A) 111 16 (A) 111 16 (A) 111 16 (A) 111 16 (A) 111 16 (A) 111 16 (A) 111 16 (A) 111 16 (A) 111 16 (A) 111 16 (A) 111 17 (A)	Azimuth 190,80 191,50 201,30 218,50 206,70 194,00 197,20 198,70 202,10 179,00 157,60 157,60 158,00	MUD L TION 8 177 DEVIATOR 1,35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.13 0.29 0.65 1.23 1.06 0.59 0.83 0.54 1.59 0.50 0.39 1.12 1.05 0.26 0.13 1.05 0.26 0.13 1.05	OGGER R BEFORE UNIS 8 18 18 18 2244 2275 2308 2337 2367 2399 2429 2429 24523 2553 2553 2553 2553 2553 2553 255	EPORT SHOW GAS DAT DATE OF THE PROPERTY OF THE	Azinuth 147.80 156.50 158.70 170.70 170.10 171.70 170.10 171.70 171.20 170.80 163.70 157.40 163.70 157.40 163.70 157.40 163.70 163.70 177.10 177.10 177.10 177.10 178.40 196.10 191.10 205.80 205.80 205.80 205.80 191.10	Formation To	Depth 3103 3103 3193 3165 3196 3257 3286 3350 3361 33413 3443	Price River 2 Blackhawk 3 Ss 40%, Sh 3 Deviation 1.06 1.02 1.15 1.26 1.38 1.40 1.36 1.12 1.09 1.16	Aximuth 174.90 175.60 174.00 167.30 169.50 159.00 159.00 152.50 159.00 159.00 159.00 159.00 159.00 159.00	DL Angle DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
MUDUANT 2 MUDUAN	Deviation 1.03 1.22 1.26 1.25 1.34 1.48 1.43 0.66 0.50 0.91 1.00 1.16 1.19 1.00 1.01 0.76 0.27 0.30 0.35 0.44 0.50	Azimuth 184.79 180.63 180.49 180.49 180.49 180.49 180.29 175.88 164.40 182.92 143.19 137.08 130.59 112.65 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75 203.90 173.03 172.10 163.30	SHOW FROM (t) 3445 3515 3515 3515 3515 3616 361	Dep 140 344 35 35 36 36 36 36 36 36	\$\frac{1}{3}\$ \$\	PATE (8) PATE (8) PATE (9) PATE (Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 198.70 202.10 202.10 179.00 157.60 164.00 149.00 155.00 161.00 158.00 161.00 158.00 161.00 158.00 161.00 158.00 161.00 158.00 161.00 158.00 161.00 158.00 161.00 158.00 161.00 158.00 161.00 158.00 158.00 161.00 158.00	MUD L. RON	OGGER R. BEFORE UNIS. 8 18 18 18 2244 2275 2306 2397 2367 2398 2448 2429 2452 2523 2553 2554 2614 2612 2703 2734 2764 2826 2826 2837 2919 2951 2981 3013 3012 3072 CCULATINIP PUMP	EPORT SHOW DAS DAY DAY DAY DAY DAY DAY DAY DAY DAY DAY	AFTER UNTS B AZIMUTh 147.80 156.50 158.70 157.60 170.170 171.70 171.90 177.10 171.70 171.90 177.10 163.70 168.40 163.70 168.10 177.10 178.90 184.00 196.10 191.10 224.80 225.50 221.40 224.80 2205.50 191.10	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.80 0.18 0.48 1.02 0.25 0.79 0.94 1.01 0.72 0.72 0.78 0.56 1.18 1.03 0.36	Depth 3103 3133 3196 3226 3257 3350 3351 3443 3442	Price River 2 Blackhawk 3 Ss 40%, Sh 3 Ss 40%, Sh 3 1.06 1.02 1.15 1.28 1.45 1.38 1.40 1.40 1.12 1.09 1.16 1.34	Azimuth 174.90 175.60 174.00 167.30 169.60 155.00 155.00 155.00 152.50 154.50 154.50 157.80 174.80	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23 1.52
MILIO MILIO	Deviation 1.03 1.22 1.20 1.22 1.20 1.22 1.20 1.22 1.20 1.22 1.20 1.22 1.20 1.25 1.34 1.48 1.43 0.84 1.43 0.84 1.43 0.81 1.48 1.43 0.81 1.48 1.43 0.81 1.48 1.48 1.49 0.71 0.86 0.50 0.91 1.00 1.01 0.76 0.97 0.30 0.35 0.35 0.34	Azimuth 184.79 185.53 186.87 188.91 180.29 175.88 164.40 162.92 175.88 164.40 162.92 175.87 180.29 175.87 180.29 175.88 164.70 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75 203.90 1773.03	SHOW FROM (R) 3445 3515 0.19 0.78 0.27 0.21 0.88 0.26 0.30 0.51 0.55 0.62 0.40 0.53 0.33 0.62 1.43 0.30 0.51 0.55 0.62 0.40 0.53 0.33 0.62 1.45 0.55 0.62 0.40 0.53 0.33 0.62 1.45 0.55 0.62 0.40 0.53 0.33 0.62 0.40 0.53 0.33 0.62 0.40 0.55 0.51 0.55 0.62 0.40 0.53 0.33 0.62 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.5	C C C C C C C C C C	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	PATE: (8) PEFORE (8) 111 16 0.69 0.75 0.73 0.34 0.51 0.33 0.81 1.20 1.00 0.88 0.44 0.93 1.12 1.05 1.15 1.70 1.61 1.91 1.88 1.95 1.74 1.99 2.03 2.42	Azimuth 190.80 190.80 190.80 201.30 218.50 208.70 194.00 149.00 149.00 149.00 158.00 148.60 158.00 148.60 158.40 164.20 158.40 164.20 158.40 164.80 148.60 148.60 148.60 148.60 148.60	MUD L TION 8 177 DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.10 0.59 0.65 1.23 1.06 0.59 0.50 0.39 1.12 1.05 0.26 1.00 0.50 0.50 0.30 1.152 1.05 0.26 1.05 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0	OGGER R. berone unts 8 18 18 18 18 18 18 18 18 18 18 18 18 1	EPORT SHOW DAS DAY DAY DAY DAY DAY DAY DAY DAY DAY DAY	Azimuth 147.80 156.50 158.70 170.70 170.10 171.70 170.10 171.70 171.90 163.70 163.70 163.70 163.70 163.70 163.70 171.90 171.90 184.00 185.00 186.10 197.10 177.90 186.10 197.10 178.90 184.00 186.10 197.10 178.90 184.00 186.10 191.10	Formation To	Depth 3103 3103 3193 3165 3196 3257 3286 3350 3361 33413 3443	Price River 2 Blackhawk 3 Ss 40%, Sh 3 Deviation 1.06 1.02 1.15 1.26 1.38 1.40 1.36 1.12 1.09 1.16	Azimuth 174.90 175.60 174.00 167.30 169.60 155.50 155.00 159.00 159.80 154.50 159.80 159.80 174.80	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23 1.52

WELL NAME		
Jensen 1-18 43-	00713	0718
LOCATION DATA		
NW NW Sec 16 T-12S	, R-10E	
1380FOOTAGES 550' FNL 500 FWL	GL	КВ
	7569	7580

EVERGREEN OPERATING, INC. DAILY DRILLING REPORT

RIG CONTACT INFORMATION:							
970 942 7543							
303 913 1054							
307 258 7315							

DATE SPUD DATE	6AM DEPTH				
9/2/2004 8/16/2004	3522				
REPORT NO.	24 HR FOOTAGE				
17	0				
DRLG CONTRACTOR	DAYS SINCE SPUD				
Elenburg, Rig 12	17				
CONSULTANT	AFE # API #				
John C. Lamb	43-007-30718				

ACTIVITY AT REPORT TIME:	DAILY COST		CUM COST		AFE COSTS	
	s	134,203	\$	595,068	\$	-
NU BOPE						

СН	RONOLOG	Y OF DAIL	Y OPERATIONS (06:00 - 06:00 HRS)	SLOW	PUMP RA	TE DATA:			IG WEIGHT INF	
FROM	то	HOURS		Depth	SPM	Pressure	Eff BHA Wt	Rotating:	Slackoff:	Hoisting:
(hrs)	(hrs)	(hrs)	Activity:			<u> </u>	40,017			
06:00	07.00	1.00	LD directional BHA							
07:00	09:00	2.00	RU to run casing							
09:00	12:15	3.25	Run 8 5/8" J55 32 lb/ft ST&C casing							
12:15	12:45	0.50	Rig repair - replace swivel hydraulic hose							
12:45	15:30	2.75	Run 8 5/8" J55 32 lb/ft ST&C casing total 80 joints leng	th 3545.91,	string weig	ht 110,000#				
15:30	18:30	3.00	Circulate casing, spot in and RU cementers, safety & co	ementing pro	ocedure me	eeting				
18:30	18:45	0.25	NU cementing head							
18:45	21:00	2.25	Cement casing with 10 bbl water ahead, 10 bbl mudflus	h; Lead: 41	2 sx CBM l	_ite, yield 4.34	, 318 bbl slurry	mixed at 10.	5 lb/gal with 28.	43 gal wtr/sx; Tail: 180 sx
			Type 3, yield 1,43, 46 bbl slurry mixed at 14.5 lb/gal wit	h 7.02 gal w	tr/sx + 3%	salt + 3% vers	aset; displace	d with 213 bb	I fresh water, bu	imped plug with
	1		645 psi over 555 psi lifting pressure (1200 psi total), ch	ecked float -	returned 1	bbl wtr and fl	oat held OK; c	asing set 2' o	ff bottom at 3520	0', reciprocated 15'
			strokes until plug was dropped, full returns through out	job, 25 bbl g	good cemer	nt to pit	-			
21:00	01:00	4.00	Cut off drilling nipple and flowline, lift annular BOP, set	slips with 11	0,000# in s	slips, cut off ca	sing, ND and r	nove out BO	PE	
01:00	04:00	3.00	NU casing head							
04:00	06:00	2.00	NU 9" BOPE							
	1									
									RECE	EIVED
									The State of	
									PEA-+	
									<u>UEU I</u>	3 2004
									<i>(**</i>	
1.00.00								UIV	1. OF OIL, C	SAS & MINING
	<u> </u>									
TOTAL	HOURS	24.00								

	DAILY	CUM
DESC.	(hrs)	(hrs)
Drill		259.75
Trip		30.75
Circulate	3.00	4.50
Rig Repair	0.50	26.50
Rig Service		5.25
Dev Survey		
NU / ND	9.00	17.50
Cement	2.50	2.50
Run Casing	8.00	8.00
woc		
OH Logging		
Mix Mud		
MI & RU		6.00
RatHole		
Mouse Hole		
Fishing		
Other		0.50
Coring		
Inspect BHA		
Cut drig line		1.25
Wash & Ream		1.25
Drill Cement		6.25
TestBOPE		1.50
woo		
PU/LD BHA	1.00	4.50
inspicirc equip		3.50
TOTALS	24.00	379.50

	SUMMARY OF DAILY & CUMULATIVE	JUS		r		r		
	DESCRIPTION OF DAILY COSTS		DAILY (\$)		CUM (\$)		AFE (\$)	
COST CODE			14/		(4)		. (*/	
2030.010	Land, Legal, Title, Survey, Arch, Damages, Permits, Signs							
2030.031	Dirtwork, Road, Location, Pits, Liner Contract Drilling 9480 / day 392.5 / h cond 5071 26,000 mob sfc 36791	\$	9,480	\$	226,112			
2030.019		s	726	\$	5,592			
2032.001	Water	\$	8,500	\$	42,500	-		
2032.013	Drill Bits, Stabilizers, Reamers	\$	21,636	\$	26,636	-		
2031.046	Cementing and Services	3	21,030	13	20,030			
2030.053	Coring and Analysis			-				
2030.052	Logging	+-		-				
2030.054	Mud Logging	\$	750	\$	3,000			
2030.037	Rental Equipment	\$	1,501	\$	28,885			
2030.028	Transportation	4	***	\$	8,842			
2032.004	Mud and Chemicals			\$	28,168			
	Directional Services, Mud Motors	\$	11,240	\$	106,512			
	Intermediate casing	\$	70,415	\$	70,415			
2030.035	Contract Labor	\$	2,325	\$	5,245			
2030.022	Engineering / Supervision	\$	800	\$	13,600	ļ		
2030.099	Intangible Miscellaneous and Contingencies							
2040.001	Surface Casing			\$	17,790			
2040.004	Production Casing							
1011.000	Float Equipment, Shoes, Centralizers	\$	1,800	\$	1,800			
1041.000	Wellhead Equipment	\$	5,030	\$	9,971			
1073.000	Bottom Hole Pump / Gas Lift / Other							
1104.000	Drivehead, Engine / Motor and Hydraulic Pump / Electric Unit							
2040.052 / 2040.055	Valves and Fittings, Small / Large							
2040.067	Other Surface Equipment							
2040,099	Tangible Miscellaneous and Contingencies							
	TOTAL COSTS	s	134,203	s	595,068	s		

	17	Date:	09/02/04	'	<u> D</u> A	ILY DR	nsen 1-18		KI						
	· · · · ·	1127	Well Na	me:		Je		T RECOR	D						
BIT	BIT		``\````	T		DEPTH	DEPTH	FOOTAGE	CUM BIT			Γ	BIT	В	Y GRADING
NO.	SIZE	4.5		SERIAL	JETS	IN ·	our	DRILLED	HOURS	ROP	WOB	RPM MTR/TBL	TORQUE	In Out Dull I no	Seals Gge Dull Ot
(*)	(In)	MFG	TYPE	NO.	(32/32/32)	(R)	(R) 1,799	1,305	(hrs) 102.75	(f/tv) 12.7	36 - 43	45 / 60	(R - ibs) 2100 - 2900		EFE 1/8 CI
	12 1/4	Security	XL18N XL43	754840 10408516	14 / 14 / 14 / 18 18 / 18 / 18	1,799	2,698	899	83.25	10.8	35 - 40	45 / 45-70		+	
3	12 1/4	Security Smith	F4	MT6085	18 / 18 / 18	2,698	3,522	824	83.25	9.9	35 - 40	45 / 60	1600 - 2550		EEE1/2 RG_TOR
4	7 7/8	Smith	F57YOD	MT2530	12 / 13 / 12	3,522		-3,522		#DIV/0!		<u> </u>		ļ	
								0		#DIV/0!	ļ <u> </u>	 		 	
								0		#DIV/0!					
COM	IENTS														
RENT	AL EQUIP	MENT							EXTERNAL	INTERNAL	DATA		тор	BOTTOM	
ITEM	COSTS	costs		SIZE	WEIGHT	GRADE	CONIN	DRIFT ID	COLLAPSE	YIELD	CAPACITY	LENGTH	SET AT	SET AT	
11/13	(\$)	(\$)			146.				(psl)	(psl)	(bbis/ft)	(R)	(ft)	(N KB)	3.7
Ming Qtrs	\$ 315	\$ 5,715		30"	NA	NA.				0.700	0.45450	40.00 500.00	0,00 2,00	40.00 498.00	
r: Tank	\$ 45	\$ 755		13 3/8*	54.5 32	J55 J55	ST&C ST&C	12.459 7.796	1,130 2,530	2,730 3,930	0.15450	3,545.00	0.00	3,520.00	
klift tajohn	\$ 60 \$ 20	\$ 750 \$ 340		8 5/8*	32	755	STAC	7.790	2,000	5,550	0.00000	0,010.00			
t Trailer	\$ 50	\$ 850													
1 Cleaner	\$ 375	\$ 7,375						В	оттомно			i	,	1	
۹	\$ 100	\$ 1,700							AD SIZE	MAXIMUM O.D.	MINIMUM I.D.	LENGTH			
odniler	\$ 90	\$ 1,440 \$ 375	ne.	SCRIPTION OF	DUA	PROV	ADER	BOX	PIN	(ln)	(In)	(ft)	HOURS RUN	HRS SINCE INSPECTION	
mud cinr collars	\$ 196	\$ 375 \$ 5,585		Bit	Drv		nith	20%	4 1/2 R	7.875		1.00			
ick Sub	\$ 250	\$ 4,000		Bit sub			ig	4 1/2 R	4 1/2 XH						
*				iffith Shock			idl●	4 1/2 XH	4 1/2 XH	6.500					
*		└ ──┤		6 1/2" Drill C			ig	4 1/2 XH 4 1/2 XH	4 1/2 XH 4 1/2 XH	6.500 4.500	2.313	<u> </u>	 		
		<u> </u>	- ²	- 4 1/2" HW	ur	R	ig	→ 1/2 AM	7 1/4 AFT	4.550	1	<u> </u>			
				_								-		 	
DTALS	\$ 1,501	\$ 28,885													
7.50			a, racy:			I day		G MUD R		Maria and a	, Forest				Man des
AMPLE		MUD	PUNNEL.			GEL STRENGTH	FILTRATE	CALCIUM	CAKE THICKNESS	SOUDS	SAND	рН	CHLORIDES	ALKALINITY	LCM
DEPTH (ft)	TIME (hh:mm)	WT. (PPg)	VISCOSITY (sec/qt)	PV/YP	(%)	(16/100 ft2)	(ml/30 min)	(ppm)	(/32 in)	(% vol)	(% vol)	P7	(ppm)	Pf/Mf	lb/gal
3,522	18:30	9.30	37	8 / 13	2.20	4/8	15.0	20	2	5.5	1/4	9.5	14,000	.9/4	
											-				
								0007.01	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Jane Canada		In the contract of			1
4467 y 43074				T 1885 I	1.1 (1.15) 1.14 (1.15)	DA	ILY MUD	COST&I	NVENTOR	Y	1				TOTAL
			BARITE	QUICK GEL	CAUSTIC	LIME	SODA ASH	UNIDRILL	SOLKWICK (ex.)	PAC-R (sx)	PIPA (gal)	CEDAR (sx)	TRUCKING (\$)		costs (\$)
cost			(≠ ×)	(*x)	(*×)	(sx)	(sx)	(sx)	(* *)	V-8/2000	7844	J/			
RTING INV	ENTORY		120												
NTORY RE				<u> </u>						••		ļ			
D LAST 24															
DING INVEN											+	 			
	ST					l .					l				4,
	ST MULATIVE COST														23,
EVIOUS CUM	MULATIVE COST	,													
MULATIVE	MULATIVE COST				OATE	NA DESCRIPTION		OGGER RI		TA.					23,
EVIOUS CUA MULATIVE A	MULATIVE COST		SHOW INTE	RVAL TO	RATE (DE PENETRATI			EPORT SHOW GAS DA	AFTER	Formation	Tops:		2100' Castlega	23, 28,
EVIOUS CUR MULATIVE N MUD MUD BACK SROUND	MULATIVE COST MUD COST GAS DATA (In L CONN GAS	Inits)	FROM (ft)	TO (ft)	BEFORE (ft)		ON AFTER (R)		SHOW GAS DA DURING UNITS	AFTER UNITS			Blackhawk	3420'	23, 28,
MULATIVE A MULATIVE A MUD BACK BROUND 7 - 9	GAS DATA (In U CONN GAS 7 - 9	inits)	FROM (ft) 3445	TO (N) 3448	BEFORE (ft) 11	DURING (R) 5	AFTER (R)	BEFORE	SHOW GAS DA DURING	AFTER		centages:	Blackhawk		23, 28,
VIOUS CUA IULATIVE A MUD BACK ROUND	MULATIVE COST MUD COST GAS DATA (In L CONN GAS	inits)	FROM (ft)	TO (ft)	BEFORE (ft)	DURING	ON AFTER (R)	BEFORE UNITS 8	SHOW GAS DA DUFUNG UNITS 43	AFTER UNITS	Sample per	centages:	Blackhawk	3420'	23, 28,
MULATIVE N MUD BACK ROUND 7 - 9	GAS DATA (In U CONN GAS 7 - 9	inits)	FROM (ft) 3445	TO (N) 3448	BEFORE (ft) 11	DURING (R) 5	AFTER (R)	BEFORE UNITS 8	SHOW GAS DA DUFUNG UNITS 43	AFTER UNITS	Sample per	centages:	Blackhawk	3420'	23, 28,
MUDATIVE A MUD BACK ROUND 7 - 9	GAS DATA (In U CONN GAS 7 - 9	inits)	FROM (ft) 3445	TO (N) 3448	BEFORE (ft) 11	DURING (R) 5	ON AFTER (n) 8 17	BEFORE UNITS 8	SHOW GAS DA DURING UNITS 43 53	AFTER UNITS	Sample per	centages:	Blackhawk	3420'	23, 28,
MULATIVE A MULATIVE A MUD BACK ROUND 7 - 9 18	GAS DATA (In CONN GAS 7 - 9 18 - 20 Deviation	TRIP GAS Azimuth	FROM (R) 3445 3515 DL Angle	TO (A) 3448 3519 Depth	BEFORE (8) 11 16 Deviation	DURING (R) 5 11 Azimuth	AFTER (R) 8 17 DEVIAT	BEFORE UNITS 8 18 18 ION SUI	DUTUNG UNITS 43 53 RVEYS Deviation	AFTER UNITS 8	Sample per Sample Desc	centages; ription;	Blackhawk Ss 40%, Sh	3420' 1 30%, Sitst 30%	23, 28. ste 3110' 4
MUD BACK ROUND 7-9 18	GAS DATA (in U	Azimuth	FROM (ft) 3445 3515 DL Angle 0.19	TO (h) 3448 3519 Depth 1407	BEFORE (8) 11 16 Deviation 0.69	DURING (R) 5 11 Azimuth 190.80	AFTER (R) 8 17 DEVIAT DL Angle 1.35	BEFORE UNITS 8 18 18 ION SUI Depth 2244	Deviation 2.27	AFTER UNITS 8 Azimuth 147.80	Sample per Sample Desc DL Angle 0.66	centages; ription: Depth 3103	Blackhawk Ss 40%, Sh Deviation	3420' 30%, Sitst 30% Azimuth 174,90	23, 28, ate 3110' 4 DL Angle 0.96
MUD BACK ROUND 7 - 9 18 Pepth 538 566	GAS DATA (in to CONN) GAS DATA (in to CONN) GAS TO CONN GAS TO CON	Azimuth 184.79 189.53	FROM (R) 3445 3515 DL Angle	TO (A) 3448 3519 Depth	BEFORE (8) 11 16 Deviation	DURING (R) 5 11 Azimuth	AFTER (R) 8 17 DEVIAT	BEFORE UNITS 8 18 18 ION SUI	DUTUNG UNITS 43 53 RVEYS Deviation	AFTER UNITS 8	Sample per Sample Desc	centages; ription;	Blackhawk Ss 40%, Sh	3420' 1 30%, Sitst 30%	23, 28, ste 3110'
MUD BACK ROUND 7 - 9 18 Papth 538 566 602	GAS DATA (in U	Azimuth	PL Angle 0.19 0.76 0.17 0.21	To (k) 3448 3519 Depth 1407 1438	BEFORE (8) 11 16 Deviation 0.69 0.75	DURING (8) 5 11 Azimuth 190.80 190.50	DEVIAT DL Angle 1.35 0.39	BEFORE UNITS 8 18 18 ION SUI Depth 2244 2275	DIFFUND GAS DA DA DIFFUND GAS DA DA DIFFUND GAS DA DA DIFFUND GAS DA DA DIFFUND GAS DA DA DIFFUND GAS DA DA DIFFUND GAS DA DA DA DA DA DA DA DA DA DA DA DA DA	AZIMUTH 147.80 156.50 158.70	Sample per Sample Desc	Depth 3193 3165 3196	Blackhawk Ss 40%, Sh Deviation 1.06 1.02 1.15 1.26	3420' 30%, Sist 30% Azimuth 174.90 175.60 174.00 167.30	23, 28, 28, ste 3110' 6 DL Angle 0.96 0.14 0.42 0.58
MUD BACK ROUND 7 - 9 18 0 apth 538 566 602 633 664	GAS DATA (n. CONTACT OF CONTACT OF CONTACT OF CONTACT OF CONTACT OF CONTACT OF CONTACT OF CONTACT OF CONTACT OF CONTACT OF CONTACT OF CONTACT OF CONTACT OF CONTACT OF CONTACT OF CONTACT OF CONTACT OF CONTACT OF CONTACT	Azimuth 134.79 189.53 186.87 183.91 180.49	### FROM (6) 3445 3515 DL Angle 0.19 0.76 0.17 0.21 0.65	To (A) 3448 3519 Depth 1407 1438 1468 1499 1532	Deviation 0.69 0.75 0.73 0.84 0.51	DURING (8) 5 11 Azimuth 190.80 190.50 201.30 218.50 206.70	DEVIAT DL Angle 1,35 0,39 0,47 0,83 1,08	BEFORE UNITS 8 18 18 18 18 18 18 18	CVEYS Deviation 2.27 2.24 2.06 2.05 1.95	AFTER UNITS 8 Azimuth 147.80 156.50 158.70 157.60 163.20	DL Angle 0.66 1.11 0.64 0.13	Depth 3103 3165 3196 3226	Deviation 1.06 1.15 1.26 1.45	3420' 30%, Sitst 30% Azimuth 174.90 175.60 174.00 167.30 169.60	23, 26, 26, 26, 26, 26, 27, 27, 28, 28, 28, 28, 28, 28, 28, 28, 28, 28
MULATIVE N MUD BACK ROUND 7 - 9 18 Pepth 538 566 602 633 664 695	GAS DATA (In the Cost of Cost	Azimuth 184.79 189.53 186.87 180.89 180.29	PROM (N) 3445 3515 DL Angle 0.19 0.76 0.17 0.21 0.68 0.26	Depth 1407 1438 1468 1499 1532 1563	Deviation 0.69 0.75 0.73 0.84 0.83	Azimuth 190.80 190.50 201.30 206.70 194.00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13	Depth 2244 2275 2396 2397 2399	DUTING UNITS 43 53 RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48	Azimuth 147.80 156.50 157.70 163.20	DL Angle 0.66 1.11 0.64 0.13 0.73	Depth 3103 3133 3165 3196 3226 3257	Deviation 1.06 1.02 1.15 1.26 1.45 1.38	3420' 30%, Sitst 30% Azimuth 174.90 175.60 174.00 167.30 169.60	23, 28, 28, 28, 28, 28, 28, 28, 28, 28, 28
MUD MUD MACK MUD MACK MUD MACK MUD MACK MUD MACK MUD MACK MUD MACK MUD MACK MUD MACK MUD MACK MUD MUD MACK MUD MACK MUD MUD MACK MUD MACK MUD MUD MUD MUD MUD MUD MUD MUD MUD MUD	GAS DATA (In to CONT) GAS DATA (In to CONT) GAS DATA (In to CONT) GAS 7 - 9 18 - 20 Deviation 1.03 1.22 1.25 1.34 1.36 1.32	Asimuth 184.79 195.3 165.91 180.29 175.83	PROM (ft) 3445 3515 DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36	Depth 1407 1438 1468 1499 1553 1595	Deviation 0.69 0.75 0.84 0.51 0.83 0.85	Azimuth 190.80 190.50 201.30 218.50 194.00 187.20	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29	BEFORE UNITS 8 18 18 18 Depth 2244 2275 2306 2337 2367 2399 2428	RVEYS Deviation 2.27 2.06 2.05 1.85 1.48 1.22	Azimuth 147.80 156.50 157.60 170.70 170.70	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87	Depth. 3103 3165 3196 32257 3288	Blackhawk Ss 40%, Sh Deviation 1.06 1.02 1.15 1.26 1.45 1.38	3420' 30%, Sitst 30% Azimuth 174,90 175,60 174,00 167,30 189,60 155,50	23, 28. ste 3110' 6 DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82
MUD BACK SOUND 18 18 18 18 18 18 18 18 18 18 18 18 18	GAS DATA (In the Cost of Cost	Asimuth 184.79 199.53 186.87 180.49 180.29 175.88 164.40	PROM (N) 3445 3515 DL Angle 0.19 0.76 0.17 0.21 0.68 0.26	Depth. 1407 1438 1468 1499 1532 1563 1595 1626	Deviation 0.69 0.75 0.73 0.84 0.81 0.85	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 196.70	DEVIAT DL Angle 1,35 0,39 0,47 0,83 1,08 1,13 0,29 0,43	Depth 2244 2275 2396 2397 2399	DUTING UNITS 43 53 RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48	Azimuth 147.80 156.50 157.70 163.20	DL Angle 0.66 1.11 0.64 0.13 0.73	Depth 3103 3133 3165 3196 3226 3257	Deviation 1.06 1.02 1.15 1.26 1.45 1.38	3420' 30%, Sitst 30% Azimuth 174.90 175.60 174.00 167.30 169.60	23 28 28 28 28 29 20 20 30 30 30 40 40 40 40 40 40 40 40 40 40 40 40 40
MUD SACK MUD	GAS DATA (In to CONT) GAS DATA (In to CONT) GAS DATA (In to CONT) GAS 7 - 9 18 - 20 Deviation 1.03 1.22 1.25 1.34 1.36 1.32	Asimuth 184.79 195.3 165.91 180.29 175.83	DL Angle 0.19 0.76 0.17 0.21 0.65 0.36 0.89 0.12 0.63	Depth 1407 1448 1468 1468 1499 1532 1595 1628 1857 1688	Deviation 0.69 0.73 0.84 0.51 0.83 0.85 0.81 1.20	Azimuth 190,80 190,50 201,30 218,50 206,70 194,00 187,20 198,70 202,10 202,10	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65	Depth 2244 2275 2399 2428 2460 22523	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.22 0.96 0.96 0.99 0.99	Azimuth 147.80 156.50 157.60 170.70 171.70 171.70 171.20	Sample per Sample Desc	Depth 3103 3133 3165 3196 3226 3257 3288 3320 3350 3381	Deviation 1.06 1.02 1.15 1.26 1.40 1.40 1.40 1.36 1.12 1.15 1.26 1.41 1.41 1.41 1.42 1.43 1.44 1.45 1.	3420' 30%, Sitst 30% Azimuth 174.90 175.60 174.00 167.30 169.60 155.00 159.00 154.00 154.00	23 28 28 28 28 28 29 20 20 20 20 20 20 20 20 20 20 20 20 20
MUD CLAPE N MUD SAACK NOUND 7 - 9 18 18 5566 602 633 6664 6655 727 757 757 757 758 117 8444	GAS DATA (In the Cost of Cost	Azimuth 184.79 199.53 186.87 180.49 180.49 180.49 164.40 162.92 156.82 143.19	PROM (%) 3445 3515 DL.Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.35 0.12 0.68	Depth 1407 1448 1468 1407 1438 1468 1499 1532 1563 1595 1626 1657 1688 1720	Before (8) 11 16 Deviation 0.69 0.75 0.73 0.83 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 196.70 202.10 202.10 179.00	DEVIAT DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23	Depth 2244 2275 2306 2399 2429 2420 2422 2523 2553 2553 2553 2553 2553 2660	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.42 0.98 0.98 0.98 0.91 1.23	Azimuth 147.80 156.50 158.70 157.60 163.20 170.70 171.70 171.90 171.90 171.90	DL Angle Desc DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.84 0.01 0.17 1.07	Depth 3103 3135 3196 3226 3257 3283 3320 3351 3413	Deviation 1.06 1.02 1.15 1.28 1.45 1.30 1.40 1.40 1.36	3420' 30%, Sitst 30% Azimuth 174.90 175.60 167.30 169.60 155.00 159.00 152.50 154.50 159.80	23 28 28 28 28 28 28 29 31 31 40 40 40 40 40 40 40 40 40 40 40 40 40
MULD CLAMPE N MULD SANCK ROUND 7 - 9 18 553 566 602 633 6664 695 57727 787 787 787 787 787 787 787 787 844 8476	GAS DATA (In the Cost of Cost	Azimuth 184.79 180.89 180.29 175.83 164.40 162.92 165.82 143.19 137.08	DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.38 0.12 0.68 1.29 1.85	Depth 1407 1448 1468 1499 1583 1595 1628 1657 1688 1720 1751	Deviation 11 16 Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.31 1.20 1.00 0.88 0.84	Azimuth 190.80 201.50 201.30 218.50 201.30 218.50 206.70 194.00 187.20 196.70 202.10 202.10 179.00 179.00	DEVIAT DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.65 1.23 1.04	BEFORE UNITS 8 18 18 18 18 18 18 18	RVEYS Deviation 2.27 2.24 2.06 1.85 1.48 1.22 0.98 0.98 0.98 0.91 1.23 1.10	Azimuth 147.80 156.50 158.70 170.70 170.10 171.90 171.20 171.20 163.20 163.20	Sample per Sample Desc	Depth 3103 3165 3296 3257 3283 3320 3350 3381 3413 3413	Deviation 1.06 1.02 1.15 1.28 1.40 1.38 1.40 1.36 1.12 1.09 1.15	3420' 30%, Sitst 30% Azimuth 174.90 175.60 174.00 187.30 169.60 155.00 155.00 154.50 159.00 159.00 159.00 160.20	23, 28, 28, 28, 28, 28, 28, 28, 28, 28, 28
MUD Depth S38 S38 664 664 665 777 777 787 787 817 844 997	GAS DATA (n t CONN GAS 7 - 9 18 - 20 19 19 19 19 19 19 19 19 19 19 19 19 19	Azimuth 184.79 189.53 188.91 180.49 180.29 175.88 184.40 182.92 156.82 143.19 137.08 130.59	PROM (%) 3445 3515 DL.Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.35 0.12 0.68	Depth 1407 1438 1468 1499 1563 1595 1628 17720 17782	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.88 0.88 0.88	Azimuth 190.80 190.50 201.30 218.50 208.70 209.70 197.20 196.70 202.10 179.00 157.60 164.00	DEVIAT DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 0.43	Depth 2244 2275 2306 2399 2429 2420 2422 2523 2553 2553 2553 2553 2553 2660	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.42 0.98 0.98 0.98 0.91 1.23	Azimuth 147.80 156.50 158.70 157.60 163.20 170.70 171.70 171.90 171.90 171.90	DL Angle Desc DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.84 0.01 0.17 1.07	Depth 3103 3135 3196 3226 3257 3283 3320 3351 3413	Deviation 1.06 1.02 1.15 1.28 1.45 1.30 1.40 1.40 1.36	3420' 30%, Sitst 30% Azimuth 174.90 175.60 167.30 169.60 155.00 159.00 152.50 154.50 159.80	23, 28, 28, 28, 28, 28, 28, 28, 28, 28, 28
MULD CLAMPE N MULD STAR N MULD	GAS DATA (In the Cost of Cost	Azimuth 184.79 180.89 180.29 175.83 164.40 162.92 165.82 143.19 137.08	DL Angle 0.19 0.76 0.17 0.21 0.68 0.39 0.12 0.68 1.29 0.51	Depth 1407 1448 1468 1499 1583 1595 1628 1657 1688 1720 1751	Deviation 11 16 Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.31 1.20 1.00 0.88 0.84	Azimuth 190.80 201.50 201.30 218.50 201.30 218.50 206.70 194.00 187.20 196.70 202.10 202.10 179.00 179.00	DEVIAT DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.65 1.23 1.04	Depth 2244 2275 2396 2492 2452 2553 2553 2564 2614	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.22 0.96 0.96 0.91 1.23 1.10 1.30	Azimuth 147.80 156.50 158.70 170.70 171.70 171.70 171.20 170.50 163.70 157.40 163.70	DL Angle Desc DL Angle Desc DL Angle Desc DL Angle D. G. G. G. D. G. G. D. D. D. D. D. D. D. D. D. D. D. D. D.	Depth 3103 3165 3296 3257 3283 3320 3350 3381 3413 3413	Deviation 1.06 1.02 1.15 1.28 1.40 1.38 1.40 1.36 1.12 1.09 1.15	3420' 30%, Sitst 30% Azimuth 174.90 175.60 174.00 187.30 169.60 155.00 155.00 154.50 159.00 159.00 159.00 160.20	23 28 28 28 28 28 29 20 20 20 20 20 20 20 20 20 20 20 20 20
MUD CLAR CLAR CLAR CLAR CLAR CLAR CLAR CLAR	GAS DATA (n t CONN GAS 7 - 9 18 - 20 1	Azimuth 184.79 189.53 188.91 180.49 180.29 175.88 164.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94	DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51 0.95	Depth 1407 1438 1468 1499 1552 1658 1720 1751 1782 1513 1544 1575	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05	Azimuth 190.80 190.50 201.30 218.50 206.70 196.70 1	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.129 0.65 1.23 1.04 0.43 1.06 0.59 0.83	Depth 2244 2275 2306 2337 2367 2399 2429 2452 2523 2553 2564 2614 2644 2672 2703	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.42 1.22 0.98 0.98 0.91 1.23 1.10 1.30 1.60 1.60	Azimuth 147.80 156.50 158.70 157.60 163.20 170.70 171.90 171.90 171.90 175.40 165.40 165.40 165.40	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.30 1.20 0.30 1.20 0.48 0.48 0.48	Depth 3103 3165 3296 3257 3283 3320 3350 3381 3413 3413	Deviation 1.06 1.02 1.15 1.28 1.40 1.38 1.40 1.36 1.12 1.09 1.15	3420' 30%, Sitst 30% Azimuth 174.90 175.60 174.00 187.30 169.60 155.00 155.00 154.50 159.00 159.00 159.00 160.20	23, 28, 28, 28, 28, 28, 28, 28, 28, 28, 28
MUCHUE CLA MACULATIVE N MACULAT	GAS DATA (In the Cost of Cost	Azimuth 184.79 199.53 188.91 180.49 180.29 175.86 164.40 162.92 156.82 143.18 137.08 130.59 112.85 107.94	DLAngle 0.19 0.76 0.17 0.21 0.68 0.26 0.39 0.12 0.68 1.29 1.88 0.51 0.99 1.04 0.65	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1688 1720 1751 1782 1813 1844 1875 1906	Before (8) 11 16 Deviation 0.69 0.75 0.73 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.18	Azimuth 190.80 190.50 201.30 216.50 187.20 196.70 197.50 164.00 155.00 146.50 152.00 1	DEVIAT DLAngle 1.35 0.39 0.47 0.83 1.08 1.123 1.04 0.43 1.29 0.43 1.09 0.50 0.50 0.50 0.50 0.50 0.50 0.50	Depth 2244 2275 2306 2337 2429 2460 2492 2523 2553 2584 2614 2644 2672 2703 2734	RVEYS Deviation 2.27 2.24 2.06 1.95 1.43 1.22 0.98 0.98 1.23 1.10 1.30 1.60 1.58 1.68 1.68	Azimuth 147.80 156.50 158.70 157.60 163.20 170.70 171.70 171.90 171.80 163.70 163.70 163.70 163.70	DL Angle DE Angle	Depth 3103 3165 3296 3257 3283 3320 3350 3381 3413 3413	Deviation 1.06 1.02 1.15 1.28 1.40 1.38 1.40 1.36 1.12 1.09 1.15	3420' 30%, Sitst 30% Azimuth 174.90 175.60 174.00 187.30 169.60 155.00 155.00 154.50 159.00 159.00 159.00 160.20	23, 28, 28, 28, 28, 28, 28, 28, 28, 28, 28
MUD Depth 18 Per	GAS DATA (In 1: CONN GAS	Azimuth 184.79 185.87 185.91 180.29 175.83 186.82 143.19 137.08 130.59 112.65 107.94 109.50 120.70	DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51 0.95	To (8) 3448 3519 1407 1438 1468 1499 1532 1563 1595 1626 1657 1688 1720 1751 1782 1813 1844 1575 1906 1935	Before (8) 11 16 16 16 Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.15 1.15 1.30 1.75	20.00 (15	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 0.43 0.59 0.83 0.59	Depth 2244 2275 2306 2337 2367 2399 2449 2450 2553 2564 2614 2672 2703 2703 2704 2764	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.98 0.98 0.91 1.23 1.10 1.30 1.58 1.66 1.82	Azimuth 147.80 156.50 158.70 157.80 170.10 171.20 171.20 170.40 163.70 163.70 163.70 163.70 163.70 170.80	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.30 1.20 0.18 0.43 1.02 0.25	Depth 3103 3165 3296 3257 3283 3320 3350 3381 3413 3413	Deviation 1.06 1.02 1.15 1.28 1.40 1.38 1.40 1.36 1.12 1.09 1.15	3420' 30%, Sitst 30% Azimuth 174.90 175.60 174.00 187.30 169.60 155.00 155.00 154.50 159.00 159.00 159.00 160.20	23, 28, 28, 28, 28, 28, 28, 28, 28, 28, 28
MULE CLA MULE C	GAS DATA (In the Cost of Cost	Azimuth 184.79 199.53 188.91 180.49 180.29 175.86 164.40 162.92 156.82 143.18 137.08 130.59 112.85 107.94	DL Angle 0.19 0.76 0.17 0.21 0.88 0.26 0.36 0.12 0.68 1.29 1.85 0.51 0.95 1.04 0.65	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1688 1720 1751 1782 1813 1844 1875 1906	Before (8) 11 16 Deviation 0.69 0.75 0.73 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.18	Azimuth 190.80 190.50 201.30 216.50 187.20 196.70 197.50 164.00 155.00 146.50 152.00 1	DEVIAT DLAngle 1.35 0.39 0.47 0.83 1.08 1.123 1.04 0.43 1.29 0.43 1.09 0.40 1.04 0.50 0.59 0.83	Depth 2244 2275 2306 2397 2429 2460 2492 2523 2553 2584 2614 2644 2672 2703 2734	RVEYS Deviation 2.27 2.24 2.06 1.95 1.43 1.22 0.98 0.98 1.23 1.10 1.30 1.60 1.58 1.68 1.68	Azimuth 147.80 156.50 158.70 157.60 163.20 170.70 171.70 171.90 171.80 163.70 163.70 163.70 163.70	DL Angle DE Angle	Depth 3103 3165 3296 3257 3283 3320 3350 3381 3413 3413	Deviation 1.06 1.02 1.15 1.28 1.40 1.38 1.40 1.36 1.12 1.09 1.15	3420' 30%, Sitst 30% Azimuth 174.90 175.60 174.00 187.30 169.60 155.00 155.00 154.50 159.00 159.00 159.00 160.20	23, 28, 28, 28, 28, 28, 28, 28, 28, 28, 28
MUDIC CLA MUDIC STA MACHINE N MUDIC STA	GAS DATA (In 1) GAS DATA (In 1) CONN GAS 7 - 9 18 - 20 Deviation 1.03 1.22 1.20 1.25 1.26 1.34 1.26 1.32 1.34 1.33 1.45 1.43 0.84 0.71 0.50 0.91 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Trup GAS Azimuth 134.79 189.53 186.87 188.91 190.49 180.29 175.83 184.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.70 1226.70 132.57 137.30	DL Angle 0.19 0.76 0.17 0.21 0.88 0.26 0.39 0.12 0.68 1.29 1.88 0.51 0.95 0.40 0.65 0.65 0.65 0.65 0.65 0.65 0.65 0.6	To (8) 3448 3519 Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1688 1720 1751 1782 1813 1844 1575 1906 1935 1967 1997 2028	Before (8) 11 16 Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.89 0.84 0.93 1.12 1.05 1.18 1.30 1.75 1.70 1.70 1.61	20.00 (19	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 0.43 1.09 0.59 0.83 0.54 1.59 0.83 0.59 0.83 0.50	Depth 2244 2275 2306 2337 2367 2399 2429 2426 2553 2584 2614 2672 2703 2734 2764 2826 2856 2857 2857	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.96 0.98 0.98 1.1.23 1.10 1.30 1.58 1.68 1.62 1.77 1.30 1.20 0.90	Azimuth 147.80 156.50 153.70 170.10 171.20 175.40 163.70 168.10 177.10 177.90 168.10 177.10 177.90 168.10 169.10 177.10 177.10 179.50 169.10 179.50 169.10 179.50 169.10 179.50 169.10 179.50 169.10 179.50 169.10 179.50 189.10 179.50 189.10 199.10 199.10 199.10	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87 0.81 0.01 0.17 1.07 1.07 0.62 0.30 1.20 0.18 0.43 1.02 0.25 0.79 0.94	Depth 3103 3165 3296 3257 3283 3320 3350 3381 3413 3413	Deviation 1.06 1.02 1.15 1.28 1.40 1.38 1.40 1.36 1.12 1.09 1.15	3420' 30%, Sitst 30% Azimuth 174.90 175.60 174.00 187.30 169.60 155.00 155.00 154.50 159.00 159.00 159.00 160.20	23, 28, 28, 28, 28, 28, 28, 28, 28, 28, 28
MULATIVE N MULD PACK ROUND 7 - 9 18 18 18 538 6602 633 6685 727 737 817 757 737 817 1034 1068 1069 1159 1122	GAS DATA (In the Cost of Cost	Trup GAS Trup GAS Trup GAS Trup GAS Trup 189.53 188.91 180.29 175.88 164.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 120.50 132.57 132.57 132.57 132.57 133.57 134.57 135.57	PROM (9) 3445 34515 DL Angle 0.19 0.76 0.17 0.21 0.88 0.88 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.62	Depth 1407 1438 1468 1499 1552 1563 1595 1626 1657 1688 1720 1751 1782 1813 1844 1875 1906 1935 1967 1997 2028 2060	Deviation 11 16 16 11 16 16 17 18 11 16 18 18 18 18 18 18 18 18 18 18 18 18 18	Azimuth 190.50 190.50 201.30 218.50 206.70 194.00 187.20 196.70 202.10 202.10 179.00 164.00 148.50 148.50 152.00 155.60 161.00 155.40 164.20	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.10 0.29 0.43 1.29 0.65 1.23 1.04 0.43 1.06 0.43 1.06 0.43 1.07 0.83 1.08 1.09 0.83 1.09 0.83 1.09 0.83 1.09 0.83 1.09 0.83 1.09 0.83 0.99 0.99 0.99 0.99 0.99 0.99 0.99 0.9	Depth 2244 2275 2306 2337 2367 2399 2428 2452 2523 2553 2564 2614 2626 2856 2856 2857 2919	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.45 1.22 0.98 0.99 1.130 1.10 1.30 1.60 1.60 1.60 1.62 1.77 1.70 1.70 0.90 0.90	Azimuth 147.80 156.50 158.70 170.70 170.10 171.70 171.90 171.20 170.80 163.20 163.40 165.40 1	DL Angle 0.66 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.30 1.20 0.18 0.48 1.02 0.25 0.79 0.94 1.01 0.72	Depth 3103 3165 3296 3257 3283 3320 3350 3381 3413 3413	Deviation 1.06 1.02 1.15 1.28 1.40 1.38 1.40 1.36 1.12 1.09 1.15	3420' 30%, Sitst 30% Azimuth 174.90 175.60 174.00 187.30 169.60 155.00 155.00 154.50 159.00 159.00 159.00 160.20	23, 28, 28, 28, 28, 28, 28, 28, 28, 28, 28
MUDDE CLA MADD Depth BACK ROUND 18 18 566 602 603 664 695 7727 7737 747 844 846 876 895 11094 11066 11097 11125 11121 11221	GAS DATA (In the Cost of Cost	Asimuth 184.79 199.53 168.87 188.91 100.49 187.58 144.40 162.92 175.83 144.40 162.92 175.85 143.19 137.05 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75	PROM (%) 3445 3515 DLAngle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.89 0.12 0.68 0.69 0.12 0.68 0.69 0.12 0.68 0.51 0.99 0.10 0.10 0.10 0.10 0.10 0.10 0.1	Depth 1407 1438 1468 1499 1532 1563 1595 1628 1657 1688 1720 1751 1782 1813 1844 1975 1996 1935 1997 2028 2060 2091	Deviation 0.69 0.75 0.73 0.83 0.84 0.51 0.00 0.85 0.81 1.20 1.100 0.88 0.84 0.93 1.12 1.05 1.18 1.30 1.75 1.70 1.61 1.91 1.88	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 157.60 164.00 155.00 155.00 155.40 154.20 155.40 154.50 155.20	DEVIAT DL. Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.23 1.06 0.59 0.83 1.06 0.59 0.83 1.07 0.83 1.08 1.11 1.09 0.83 1.09 0.43 1.19 0.83 1.09 0.43 1.19 0.83 0.99 0.43 1.19 0.99 0.99 0.99 0.99 0.99 0.99 0.99	Depth	SHOW GAS DA DURING LINES 43 53 53 53 53 55 55 55 55 55 55 55 55 55	Azimuth 147.80 156.50 158.70 170.10 171.90 171.90 165.40 163.70 165.40 169.70 177.10 1	DL Angle DL Angle O.66 1.11 O.64 O.13 O.73 O.87 O.84 O.01 O.17 O.82 O.85	Depth 3103 3165 3296 3257 3283 3320 3350 3381 3413 3413	Deviation 1.06 1.02 1.15 1.28 1.40 1.38 1.40 1.36 1.12 1.09 1.15	3420' 30%, Sitst 30% Azimuth 174.90 175.60 174.00 187.30 169.60 155.00 155.00 154.50 159.00 159.00 159.00 160.20	23, 28, 28, 28, 28, 28, 28, 28, 28, 28, 28
MUDDE CLA MUDDE	GAS DATA (In the cost of the c	Trup GAS Azimuth 134.79 189.53 186.87 188.91 190.49 180.29 175.83 184.40 162.92 156.82 143.19 147.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 137.30 141.51 165.70 235.75 203.90	DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.59 0.12 0.63 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.62 1.43 0.62	To (8) 3448 3519 Depth 1407 1438 1468 1498 1532 1563 1595 1626 1657 1688 1720 1751 1782 1813 1844 1575 1906 1935 1967 1997 2028 2060 2091 2120	Before (8) 11 16 Deviation 0.89 0.75 0.73 0.84 0.51 0.81 1.20 1.00 0.89 0.84 0.93 1.12 1.05 1.18 1.30 1.75 1.70 1.61 1.91 1.88 1.95 1.74	208.70 190.80 190.80 190.50 201.30 218.50 194.00 187.70 202.10 202.10 196.70 194.00 157.60 164.00 148.50 158.00 161.00 158.00 161.00 158.40 164.20 154.10 155.20 144.60	DEVIAT DL'Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.43 1.29 0.43 1.04 0.43 1.09 0.59 0.80 0.59 0.80 0.59 0.80 0.59 0.80 0.59 0.80 0.59 0.80 0.59 0.80 0.59 0.80 0.59 0.80 0.59 0.80 0.59 0.80 0.59 0.80 0.59 0.80 0.59 0.80 0.59 0.80 0.59 0.80 0.59 0.80 0.59 0.80 0.59 0.50 0.50 0.50 0.50 0.50 0.50 0.5	Depth 2244 2275 2306 2387 2981 2646 2656 2887 2981	RVEYS Devisition 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.98 0.98 0.98 1.123 1.10 1.30 1.59 1.60 1.59 1.62 1.77 1.30 1.30 1.20 0.90 0.90 0.90	Azimuth 147.80 155.50 153.70 170.70 171.90 171.20 163.70 165.40 1	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.30 1.20 0.18 0.43 1.02 0.25 0.79 0.94 1.01 0.72 0.72 0.78	Depth 3103 3165 3296 3257 3283 3320 3350 3381 3413 3413	Deviation 1.06 1.02 1.15 1.28 1.40 1.38 1.40 1.36 1.12 1.09 1.15	3420' 30%, Sitst 30% Azimuth 174.90 175.60 174.00 187.30 169.60 155.00 155.00 154.50 159.00 159.00 159.00 160.20	23, 28, 28, 28, 28, 28, 28, 28, 28, 28, 28
MUD Depth 538 602 633 6664 695 727 737 731 1034 844 876 9907 11123 1159 1159 1159 1159 1159 1159 1159 115	GAS DATA (In the Cost of Cost	Asimuth 184.79 199.53 168.87 188.91 100.49 187.58 144.40 162.92 175.83 144.40 162.92 175.85 143.19 137.05 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75	PROM (%) 3445 3445 3515 DLAngle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.59 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.62 1.43 0.53 0.62 1.43 0.51 0.51	Depth 1407 1438 1468 1499 1532 1563 1595 1628 1657 1688 1720 1751 1782 1813 1844 1975 1996 1935 1997 2028 2060 2091	Deviation 0.69 0.75 0.73 0.83 0.84 0.51 0.00 0.85 0.81 1.20 1.100 0.88 0.84 0.93 1.12 1.05 1.18 1.30 1.75 1.70 1.61 1.91 1.88	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 157.60 164.00 155.00 155.00 155.40 154.20 155.40 154.50 155.20	DEVIAT DL. Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.23 1.06 0.59 0.83 1.06 0.59 0.83 1.07 0.83 1.08 1.11 1.09 0.83 1.09 0.43 1.19 0.83 1.09 0.43 1.19 0.83 0.99 0.43 1.19 0.99 0.99 0.99 0.99 0.99 0.99 0.99	Depth	SHOW GAS DA DURING LINES 43 53 53 53 53 55 55 55 55 55 55 55 55 55	Azimuth 147.80 156.50 158.70 170.10 171.90 171.90 165.40 163.70 165.40 169.70 177.10 1	DL Angle DL Angle O.66 1.11 O.64 O.13 O.73 O.87 O.84 O.01 O.17 O.82 O.85	Depth 3103 3165 3296 3257 3283 3320 3350 3381 3413 3413	Deviation 1.06 1.02 1.15 1.28 1.40 1.38 1.40 1.36 1.12 1.09 1.15	3420' 30%, Sitst 30% Azimuth 174.90 175.60 174.00 187.30 169.60 155.00 155.00 154.50 159.00 159.00 159.00 160.20	23, 28, 28, 28, 28, 28, 28, 28, 28, 28, 28
MUCOLE CLA MACULATIVE N MACULAT	GAS DATA (In 1) GAS DATA (In 1) CONN GAS 7 - 9 18 - 20 Deviation 1.03 1.22 1.20 1.25 1.34 1.26 1.32 1.34 1.45 1.43 1.45 1.43 1.45 1.41 1.45 1.41 1.45 1.41 1.41 1.45 1.45	Trup GAS Azimuth 194.79 189.53 185.91 180.29 175.88 164.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75 203.90	PROM (N) (N) (N) (N) (N) (N) (N) (N) (N) (N)	Depth 1407 1438 1468 1499 1532 1563 17751 1782 1814 1847 1975 1906 1997 2028 2060 2091 2120 2152	Deviation 11 16 Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.93 1.12 1.00 1.18 1.30 1.75 1.70 1.61 1.91 1.88 1.95 1.74	Azimuth 190.50 201.30 218.50 209.70 194.00 187.20 196.70 202.10 202.10 179.00 164.00 149.00	DEVIAT DL Angle 1,35 0,39 0,47 0,83 1,08 1,13 0,29 0,43 1,129 0,65 1,23 1,04 0,43 1,06 0,43 1,09 0,55 1,23 1,04 0,43 1,05 0,38 1,08 1,09 1,109 1,09 1,09 1,09 1,1	Depth 2244 2275 2306 2337 2367 2399 2428 2460 2492 2523 2553 2553 2564 2614 2624 2672 2703 2734 2764 2826 2856 2857 2919 2951 2981 3013	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.45 1.22 0.98 0.99 1.130 1.60 1.60 1.60 1.60 1.60 1.60 1.60 1.6	Azimuth 147.80 156.50 158.70 157.60 163.20 170.70 171.90 171.20 171.70 171.90 171.70 171.70 171.70 171.70 171.70 171.70 165.70 165.70 168.10 177.70 176.81 184.00 196.10 191.00 205.80 221.40	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.82 0.30 1.20 0.18 0.48 1.02 0.25 0.79 0.94 1.01 0.72 0.73	Depth 3103 3165 3296 3257 3283 3320 3350 3381 3413 3413	Deviation 1.06 1.02 1.15 1.28 1.40 1.38 1.40 1.36 1.12 1.09 1.15	3420' 30%, Sitst 30% Azimuth 174.90 175.60 174.00 187.30 169.60 155.00 155.00 154.50 159.00 159.00 159.00 160.20	23 28 28 28 28 28 29 20 20 20 20 20 20 20 20 20 20 20 20 20
MUCOLE CLA MACULATIVE N MACULAT	GAS DATA (In the Cost of Cost	TRUP GAS Asimuth 184.79 199.53 186.87 180.29 175.88 164.40 162.92 175.88 164.91 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75 203.90 173.03 173.03	PROM (%) 3445 3445 3515 DLAngle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.59 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.62 1.43 0.53 0.62 1.43 0.51 0.51	To (8) 3448 3519 Depth 1407 1438 1468 1499 1532 1563 1595 1628 1657 1688 1720 1751 1782 1813 1844 1995 1995 1997 2028 2060 2091 2120 2152 2153	BEFORE (8) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 157.60 164.00 155.00 161.00 155.40 155.40 155.50 164.50 1	DEVIAT DL. Angle 1.08 1.08 1.08 1.08 1.08 1.08 1.08 1.08	BEFORE UNITS 8 18 18 18 2244 2275 2306 2337 2367 2367 2367 2367 2480 2492 2460 2492 2523 2553 2554 2614 2644 2672 2703 2734 2764 2826 2856 2857 2919 2951 2981 3013 3042	SHOW GAS DA DURING LINES 43 53 53 53 53 53 55 55 55 55 55 55 55 55	Azimuth 147.80 156.50 158.70 170.10 171.90 171.90 163.70 1	DL Angle Desc Sample Desc Sample Desc DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.80 1.20 0.18 0.48 1.02 0.25 0.79 0.94 1.01 0.72 0.78 0.56 1.18 1.03	Depth 3103 3165 3296 3257 3283 3320 3350 3381 3413 3413	Deviation 1.06 1.02 1.15 1.28 1.40 1.38 1.40 1.36 1.12 1.09 1.15	3420' 30%, Sitst 30% Azimuth 174.90 175.60 174.00 187.30 169.60 155.00 155.00 154.50 159.00 159.00 159.00 160.20	23, 28, 28, 28, 28, 28, 28, 28, 28, 28, 28
MUDON CLAR MAD CONTROL	GAS DATA (In the Cost of Cost	TRUP GAS Asimuth 184.79 199.53 186.87 180.29 175.88 164.40 162.92 175.88 164.91 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75 203.90 173.03 173.03	PROM (%) 3445 3445 3515 DLAngle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.59 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.62 1.43 0.53 0.62 1.43 0.51 0.51	To (8) 3448 3519 Depth 1407 1438 1468 1499 1532 1563 1595 1628 1657 1688 1720 1751 1782 1813 1844 1995 1995 1997 2028 2060 2091 2120 2152 2153	BEFORE (8) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1	Azimuth 190.80 190.50 201.30 218.50 201.30 218.50 201.30 195.70 194.00 157.60 164.00 155.00 161.00 155.40 155.00 161.00 155.40 155.20 144.50 145.10 145.10 145.10	DEVIAT DLAngle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 0.43 1.09 0.43 1.09 0.43 1.09 0.65 1.23 1.00 0.65 1.23 1.00 0.65 1.23 1.00 0.65 1.23 1.00 0.65 1.23 1.00 0.65 1.23 1.00 0.65 1.23 1.00 0.65 1.23 1.00 0.65 1.23 1.00 0.65 1.23 1.00 0.65 1.23 1.00 0.65 1.23 1.00 0.65 1.23 0.65 0.30 0.30 0.30 0.30 0.30 0.30 0.30 0.3	Depth 2244 2276 2306 2337 2367 2399 2429 2460 2492 2523 2553 2564 2614 2674 2676 2703 2734 2764 2826 2856 2857 2919 2951 2981 3013 3042 3072	RVEYS Peviation 2.27 2.24 2.06 2.05 1.85 1.42 1.22 0.98 0.991 1.23 1.10 1.30 1.60 1.50 1.60 1.62 1.77 1.30 1.60 1.60 1.60 1.60 1.60 1.60 1.60 1.6	Azimuth 147.80 156.50 158.70 170.10 171.90 171.90 163.70 1	DL Angle Desc Sample Desc Sample Desc DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.80 1.20 0.18 0.48 1.02 0.25 0.79 0.94 1.01 0.72 0.78 0.56 1.18 1.03	Depth 3103 3165 3296 3257 3283 3320 3350 3381 3413 3413	Deviation 1.06 1.02 1.15 1.28 1.40 1.38 1.40 1.36 1.12 1.09 1.15	3420' 30%, Sitst 30% Azimuth 174.90 175.60 174.00 187.30 169.60 155.00 155.00 154.50 159.00 159.00 159.00 160.20	23, 28, 28, 28, 28, 28, 28, 28, 28, 28, 28
MUCOLE CLA MACULATIVE N MACULAT	GAS DATA (In the Cost of Cost	TRUP GAS Asimuth 184.79 199.53 186.87 180.29 175.88 164.40 162.92 175.88 164.91 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75 203.90 173.03 173.03	PROM (%) 3445 3445 3515 DLAngle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.59 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.62 1.43 0.53 0.62 1.43 0.51 0.51	To (8) 3448 3519 Depth 1407 1438 1468 1499 1532 1563 1595 1628 1657 1688 1720 1751 1782 1813 1844 1995 1995 1997 2028 2060 2091 2120 2152 2153	BEFORE (8) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1	Azimuth 190.80 190.50 201.30 218.50 201.30 218.50 201.30 195.70 194.00 157.60 164.00 155.00 161.00 155.40 155.00 161.00 155.40 155.20 144.50 145.10 145.10 145.10	DEVIAT DLAngle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 0.43 1.09 0.43 1.09 0.43 1.09 0.65 1.23 1.00 0.65 1.23 1.00 0.65 1.23 1.00 0.65 1.23 1.00 0.65 1.23 1.00 0.65 1.23 1.00 0.65 1.23 1.00 0.65 1.23 1.00 0.65 1.23 1.00 0.65 1.23 1.00 0.65 1.23 1.00 0.65 1.23 1.00 0.65 1.23 0.65 0.30 0.30 0.30 0.30 0.30 0.30 0.30 0.3	Depth 2244 2276 2306 2337 2367 2399 2429 2460 2492 2523 2553 2564 2614 2674 2676 2703 2734 2764 2826 2856 2857 2919 2951 2981 3013 3042 3072	SHOW GAS DA DURING LINES 43 53 53 53 53 53 55 55 55 55 55 55 55 55	Azimuth 147.80 156.50 158.70 170.70 170.10 171.20 171.20 170.10 157.40 163.70 163.10 177.70 179.80 163.70 163.70 163.70 163.70 163.70 163.70 163.10 177.10 179.80 184.00 196.10 191.00 205.80 221.40 224.80 205.50 206.00	DL Angle Desc Sample Desc Sample Desc DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.80 1.20 0.18 0.48 1.02 0.25 0.79 0.94 1.01 0.72 0.78 0.56 1.18 1.03	Depth 3103 3133 3165 3196 3226 3257 3283 3391 3413 3472	Deviation 1.06 1.02 1.15 1.28 1.40 1.38 1.40 1.36 1.12 1.09 1.15	3420' 30%, Sitst 30% Azimuth 174.90 175.60 174.00 187.30 169.60 155.00 155.00 154.50 159.00 159.00 159.00 160.20	23, 28, 28, 28, 28, 28, 28, 28, 28, 28, 28
MUDDE CLA MUDDE	GAS DATA (In 1 CONN GAS 7 - 9 18 - 20 Deviation 1.03 1.22 1.20 1.26 1.34 1.26 1.32 1.34 1.33 1.45 1.34 1.31 1.45 1.31 1.45 1.31 1.40 1.31 1.41 1.31 1.41 1.31 1.42 1.32 1.34 1.33 1.45 1.34 1.35 1.35 1.36 1.37 1.38 1.38 1.38 1.38 1.38 1.38 1.38 1.38	TRUP GAS Azimuth 134.79 189.53 186.87 188.91 180.29 175.83 164.40 162.92 156.82 143.19 127.03 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75 203.90 173.03 172.10	PROM (N) 3445 345 3515 DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.59 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.65 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.62 1.43 0.33 0.62 1.43 0.33 0.62	TO (8) 3448 3519 1407 1438 1468 1499 1532 1563 1595 1626 1657 1688 1720 1751 1782 1813 1844 1575 1906 1935 1967 1922 2152 2153 2213	BEFORE (8) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1	Curens (%)	DEVIAT DLAngle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 0.43 1.09 0.65 1.23 1.04 0.43 1.05 0.39 0.50 0.39 0.30 0.30 0.30 0.30 0.30 0.30 0.3	Depth	SHOW GAS DA DURING UNITS 43 53 53 53 53 53 53 53 54 55 55 55 55 55 55 55 55 55 55 55 55	Azimuth 147.80 156.50 158.70 157.60 163.20 170.70 171.90 171.20 171.20 170.50 163.70 157.40 163.70 158.40 163.70 159.60 163.70 170.60 163.70 170.60 163.70 170.60 163.70 170.60 163.70 170.60 180.70 170.60 180.70 1	Sample per Sample Desc	Depth 3103 3133 3165 3196 3257 3283 3320 3350 3381 3413 3472	Deviation	3420' 30%, Sitst 30% Azimuth 174.90 175.60 174.00 167.30 169.60 165.50 155.00 152.50 154.50 159.80 160.02 178.80	23, 28, 28, 28, 28, 28, 28, 28, 28, 28, 28
MUD CLAR CLAR CLAR CLAR CLAR CLAR CLAR CLAR	GAS DATA (In 1. CONN. GAS. 79 18 - 20 Deviation 1.03 1.22 1.20 1.22 1.20 1.25 1.34 1.22 1.34 1.35 1.43 1.43 1.43 1.43 1.43 1.43 1.43 1.43	TRUP GAS Asimuth 184.79 189.53 186.87 188.91 100.49 100.29 175.88 164.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 126.70 127.30 141.51 165.70 129.75 203.90 173.03 172.10 163.30	PROM (%) 3445 345 3515 DLAngle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.62 1.44 2.30 0.51 0.53 0.33 0.62 0.40 0.53 0.33 0.62 0.40 0.53 0.33 0.62 0.40 0.55 0.85 0.85 0.85 0.85 0.85 0.85 0.8	TO (8) 3448 3519 3448 3519 1407 1438 1468 1499 1532 1563 1595 1628 1657 1688 1720 1751 1782 1813 1844 1575 1906 1935 1997 2028 2091 2120 2152 2133 2213	Deviation 0.689 0.75 0.73 0.84 0.51 0.83 0.84 1.20 1.00 0.88 0.84 1.12 1.05 1.18 1.30 1.75 1.18 1.30 1.75 1.70 1.61 1.91 1.81 1.91 1.83 1.95 1.74 1.99 2.03 2.42 ASSLMED EFF ('y')	Azimuth 190,80 190,50 201,30 201,30 218,50 206,70 194,00 197,20 196,70 202,10 202,10 179,00 155,00 149,00 155,00 149,00 155,00 149,00 155,00 140,00 140,00 1	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.08 1.13 0.29 0.43 1.09 0.43 1.09 0.43 1.09 0.43 1.09 0.43 1.09 0.43 1.09 0.43 1.09 0.43 1.09 0.43 1.09 0.43 1.09 0.43 1.09 0.43 1.09 0.43 1.09 0.65 0.10 0.39 1.10 0.30 0.30 0.31 1.55 0.26 0.13 1.52	Depth	SHOW GAS DA DURING UNITS 43 53 8VEYS Deviation 2.27 2.24 2.06 1.95 1.49 2.05 1.95 1.41 1.22 0.99 0.98 0.98 0.99 1.23 1.10 1.30 1.60 1.55 1.82 1.77 1.30 1.60 1.50 1.80 1.82 1.77 1.20 0.99 0.90 0.90 0.90 0.90 0.90 0.90 0	Arter (Natis) 8 Azimuth 147.80 156.50 158.70 158.70 157.60 163.20 170.10 171.70 171.90 171.90 171.90 171.90 171.90 171.90 171.90 171.90 183.70 184.00 199.10 199.10 199.10 199.10 199.10 199.10 199.10 199.10 199.10 199.10	DL Angle Desc Sample Desc DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.82 0.19	Depth 3103 3133 3165 3196 3226 3250 3350 3351 3443 34472	Deviation 1.06 1.02 1.15 1.26 1.45 1.34 1.12 1.09 1.15 1.13 1.14 1.14 1.15 1.15 1.15 1.15 1.15 1.15 1.16 1.17 1.18 1.	3420' 30'4, Sitst 30'7 30'4, Sitst 30'7 Azimuth 174.90 175.80 174.00 167.30 169.60 155.00 159.00 159.00 159.00 174.80 160.20 178.80	23, 28, 28, 28, 28, 28, 28, 28, 28, 28, 28
MUDIC CLA MUDIC STA MACK ROUND 7 - 9 18 556 602 603 664 695 727 737 737 737 1034 876 997 1034 998 9971 1034 1066 10697	GAS DATA (In 1 CONN GAS 7 - 9 18 - 20 Deviation 1.03 1.22 1.20 1.26 1.34 1.26 1.32 1.34 1.33 1.45 1.34 1.31 1.45 1.31 1.45 1.31 1.40 1.31 1.41 1.31 1.41 1.31 1.42 1.32 1.34 1.33 1.45 1.34 1.35 1.35 1.36 1.37 1.38 1.38 1.38 1.38 1.38 1.38 1.38 1.38	TRUP GAS Azimuth 134.79 189.53 186.87 188.91 180.29 175.83 164.40 162.92 156.82 143.19 127.03 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75 203.90 173.03 172.10	PROM (N) 3445 345 3515 DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.59 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.65 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.62 1.43 0.33 0.62 1.43 0.33 0.62	TO (8) 3448 3519 1407 1438 1468 1499 1532 1563 1595 1626 1657 1688 1720 1751 1782 1813 1844 1575 1906 1935 1967 1922 2152 2153 2213	BEFORE (8) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1	20.00 (1) (1) (2) (2) (2) (2) (3) (4) (2) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4	DEVIAT DLAngle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 0.43 1.09 0.65 1.23 1.04 0.43 1.05 0.39 0.50 0.39 0.30 0.30 0.30 0.30 0.30 0.30 0.3	Depth	SHOW GAS DA DURING UNITS 43 53 53 53 53 53 53 53 54 55 55 55 55 55 55 55 55 55 55 55 55	Azimuth 147.80 156.50 158.70 158.70 170.10 171.70 171.90 171.90 171.90 171.90 171.90 171.90 171.90 171.90 171.90 183.70 183.70 185.40 183.70 185.40 185.40 185.40 191.10 177.10 178.90 184.00 191.10 191.10 224.80 225.80 221.40 224.80 225.80 205.00 191.10	DL Angle O.66 O.66 O.64 O.64 O.64 O.64 O.67 O.64 O.67 O.67 O.67 O.67 O.68 O.69 O.6	Depth 3103 3133 3165 3196 3257 3283 3320 3350 3381 3413 3472	Deviation 1.06 1.02 1.15 1.26 1.40 1.	3420' 30%, Sitst 30% Aximuth 174.90 175.60 174.00 167.30 155.00 159.00 159.00 159.00 159.80 154.50 158.80 178.80 ANNLAR VE DC (tvmin)	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2

	ELL NAME: Jensen 1-18 S. OF TBG: 80			TBG. GRADE & WT:	J55 32 lb/ft	TALLIED BY:	crew						
S. Or			80		THREAD:	ST&C	CONDITION:	new					
	KB:	44.22: 44	40.04	1010.51	RANGE:	3	DATE:	09/31/04			;		
	44.33	44.33 41	43.84	1816.54									
2	44.32	88.65 42	44.63	1861.17									
3	44.35	133.00 43	44.16	1905.33							<u> </u>		
4	44.35	177.35 44	43.93	1949.26									
5	44.33	221.68 45	44.35	1993.61									
6	44.33	266.01 46	44.36	2037.97					i i				
7	44.00	310.01 47	43.81	2081.78									
8	44.34	354.35 48	44.58	2126.36									
9	44.32	398.67 49	44.35	2170.71	:								
10	44.34	443.01 50	44.35	2215.06									
11	44.34	487.35 51	44.23	2259.29									
12	43.90	531.25 52	43.73	2303.02							1		
13	44.58	575,83 53	44.40	2347.42	····						ļ		
14	44.32	620.15 54	44.34	2391.76							·		
15	44.34	664.49 55	44.60	2436,36							\$ \$		····
16	44.01	708.50 56	44.04	2480.40									
17	44.59	753.09 57	44.60	2525.00							·············		
18	44.34	797.43 58	44.61										
	1.00			2569.61									
19	44.34	841.77 59	44.59	2614.20							ļ		
20	44.21	885.98 60	43.95	2658.15							ļ		
21	44.33	930.31 61	44.61	2702.76									
22	44.61	974.92 62	44.05	2746.81							ļ		
23	44.37	1019.29 63	44.07	2790.88					; ;				
24	44.35	1063.64 64	44.62	2835.50		l from yard = 3499.78							
25	************	1108.00 65	44.61	2880.11	1 jt from (Colo Tubulars = 43.13							
26	44.31	1152.31 66	44.60	2924.71					[ii		
27	44.34	1196.65 67	44.58	2969.29					l l				
28	44.62	1241.27 68	44.61	3013.90							i i		
29	44.32	1285.59 69	43.78	3057.68					: :				
30	44.32	1329.91 70	43.77	3101.45									
31	44.33	1374.24 71	44.59	3146.04									
32	44.36	1418.60 72	44.12	3190.16	: :				: : : : : : : : : : : : : : : : : : :		:		
33	44.12	1462.72 73	44.29	3234.45			: ;						
34	44.55	1507.27 74	44.32	3278.77					· · · · · · · · · · · · · · · · · · ·				
35	44.63	1551.90 75	43.80	3322.57	:				† · · · · · · · · · · · · · · · · · · ·				
36	44.16	1596.06 76	44,33	3366.90					!····				
37		1639.88 77	43.98	3410.88									
38	44.07	1683.95 78	44.58	3455.46	····								
39	44.60	1728.55 79	44.32	3499.78					<u> </u>		+		
40	44.15	1772.70 80	43.13	3542.91					ļ		.		
	*********	1172.70; 00	,	3342.51	0.00	0.00				000	0.00		0.00
£	1772.70		1770.21		0.00	0.00	0.0	10):	0.	UU)	0.00	Ħ	0.00

			E	VGREEN OPERATING Casing Running & Cem						
	Well Name:	Jensen 1	-18	County:	Carbon			State:	Utah	
	Hole Size: Ground Level:		Depth DF	3522 ' Date Cemented:	9/1/	2004	Mud We	ight:	9.2	#/gallon
			<u>-</u> :			Throads	Off Magu	roment \		
		Casing De	etail (Sno	ow casing as run in holebott	om to top.	, inreads				
No. of			: 	Manufacturan Itam	Wt./#	Grade		ype reads		Footage
Joints:	O.D. 8 5/8		Gemoco	ManufacturerItem Sur Seal Float Shoe	VV (./#	Grade		T&C		1.6
1	8 5/8		Ipsco	Cur Cear Float Crice	32	J55		T&C		44.33
	8 5/8			Sur Seal Float Collar				T&C		1.4
78	8 5/8		Ipsco		32	J55		T&C	-	3455.45
1	8 5/8		Maverick	(32	J55	S	T&C		43.13
		-								
								TOTAL:	makes a construction of the construction of th	3545.91
								UPSET:		25
	Set Casing @:	3520	' KB	Scratchers:				SET AT:		3520.91
	Total Jts. Run:	80	KB	ociateners.						
	AT COLLAR @:	3473.58	' KB	Centralizers:						18
water &	float held OK									
Cou	menting Compa	nv: H	ES			Circulated	180	mins. @	70	psi.
	Started Mixing:	18:40				Pressure		645 ove	-	psi.
	Plug Down @	20:55				11000010	Bled to:	040 010		psi.
	<u>ς, Tail: 180 sx Ty</u>			Cemented wi <u> Mud flush, Lead 412 sx CBM </u> <u> bbl slurry mixed at 14.5 b/gal v</u>	<u>ite, yield 4</u>					

EVERGREEN OPERATING, INC. DAILY DRILLING REPORT

RIG CONTACT INFORMATION:							
OFFICE TRAILER / FAX:	970 942 7543						
CONSULTANT HAND CELL:	303 913 1054						
DOGHOUSE:	307 258 7315						
DIICHED.							

DATE SPUD DATE	SAM DEPTH				
9/3/2004 8/16/2004	3655				
REPORT NO.	24 HR FOOTAGE				
18	133				
DRLG CONTRACTOR	DAYS SINCE SPUD				
Elenburg, Rig 12	18				
CONSULTANT	AFE# API#				
John C. Lamb	43-007-30718				

ACTIVITY AT REPORT TIME:	DAILY COST		CUM COST		AFE COSTS	
	\$	12,828	\$	607,896	\$	-
Drilling ahead						

09:30 11:30 2:00 NU flowline and 11:30 14:30 3:00 Trip in hole - stra 14:30 16:30 2:00 Drill cement & flow 16:30 17:00 0:50 Wireline survey 17:00 23:30 6:50 Drill 3522 - 3610 23:30 00:45 1.25 Wireline survey	ising to 2000#, all tested OK drilling nipple ap in - tagged cement 3570' oat equipment, found some drag up a 1 1/2 deg at 3503'	n)	SPM 54 r drilling sh	Pressure 400	Eff BHA Wt 40,017	Rotating: 104,000	Slackoff: 100,000	Hoisting: 109,000	
(hrs) (hrs) Activity: 06:00 07:30 1.50 NU BOPE 07:30 09:30 2.00 Test BOPE & ca 09:30 11:30 2.00 NU flowline and 11:30 14:30 3.00 Trip in hole - stra 14:30 16:30 2.00 Drill cement & flowline survey 16:30 17:00 0.50 Wireline survey 23:30 00:45 1.25 Wireline survey	drilling nipple ap in - tagged cement 3570' pat equipment; found some drag up a 1 1/2 deg at 3503') 2 deg at 3596' (missrun 1st try & reru	nd down, after				104,000	100,000	109,000	
06:00 07:30 1.50 NU BOPE 07:30 09:30 2.00 Test BOPE & ca 09:30 11:30 2.00 NU flowline and 11:30 14:30 3.00 Trip in hole - str 14:30 16:30 2.00 Drill cement & flc 16:30 17:00 0.50 Wireline survey 17:00 23:30 6:50 Drill 3522 - 3610 23:30 00:45 1.25 Wireline survey	drilling nipple ap in - tagged cement 3570' pat equipment; found some drag up a 1 1/2 deg at 3503') 2 deg at 3596' (missrun 1st try & reru	n)	r drilling sh	noe - worked o	ut				
07:30 09:30 2.00 Test BOPE & ca 09:30 11:30 2.00 NU flowline and 11:30 14:30 3.00 Trip in hole - stra 14:30 16:30 2.00 Drill cement & flowline 16:30 17:00 0.50 Wireline survey 17:00 23:30 6.50 Drill 3522 - 3610 23:30 00:45 1.25 Wireline survey	drilling nipple ap in - tagged cement 3570' pat equipment; found some drag up a 1 1/2 deg at 3503') 2 deg at 3596' (missrun 1st try & reru	n)	r drilling sh	noe - worked o	ut				
09:30 11:30 2.00 NU flowline and 11:30 14:30 3.00 Trip in hole - stra 14:30 16:30 2.00 Drill cement & flow 16:30 17:00 0.50 Wireline survey 17:00 23:30 6.50 Drill 3522 - 3610 23:30 00:45 1.25 Wireline survey	ap in - tagged cement 3570' pat equipment; found some drag up a 1 1/2 deg at 3503') 2 deg at 3596' (missrun 1st try & reru	n)	r drilling sh	noe - worked o	ut				
11:30 14:30 3.00 Trip in hole - stre 14:30 16:30 2.00 Drill cement & flo 16:30 17:00 0.50 Wireline survey 17:00 23:30 6.50 Drill 3522 - 3610 23:30 00:45 1.25 Wireline survey	oat equipment; found some drag up a 1 1/2 deg at 3503') 2 deg at 3596' (missrun 1st try & reru	n)	r drilling sh	noe - worked o	ut				
14:30 16:30 2.00 Drill cement & flo 16:30 17:00 0.50 Wireline survey 17:00 23:30 6.50 Drill 3522 - 3610 23:30 00:45 1.25 Wireline survey	oat equipment; found some drag up a 1 1/2 deg at 3503') 2 deg at 3596' (missrun 1st try & reru	n)	r drilling st	noe - worked o	ut				
16:30 17:00 0.50 Wireline survey 17:00 23:30 6.50 Drill 3522 - 3610 23:30 00:45 1.25 Wireline survey	1 1/2 deg at 3503') 2 deg at 3596' (missrun 1st try & reru	n)				-			
17:00 23:30 6.50 Drill 3522 - 3610 23:30 00:45 1.25 Wireline survey	2 deg at 3596' (missrun 1st try & reru								
23:30 00:45 1.25 Wireline survey									
00:45 06:00 5.25 Drill 3610 - 3655	5, 20K drag on connections at 3626 &	3655							
								<u></u> .	
	turned all directional tools & 7" rental found one cracked HWDP box	drill collars					CEIVE C 1 3 20	04	

	DAILY	CUM
DESC.	(hrs)	(hrs)
Drill	12.25	272.00
Trip	3.00	30.75
Circulate		4.50
Rig Repair		26.50
Rig Service		5.25
Dev Survey	1.25	1.25
NU/ND	3.50	21.00
Cement		2.50
Run Casing		8.00
woc		
OH Logging		
Mix Mud		
MI & RU		6.00
RatHole		<u> </u>
Mouse Hole		
Fishing		
Other		0.50
Coring		
Inspect BHA		l
Cut drig line		1.25
Wash & Ream		1.25
Drill Cement	2.00	8.25
Test BOPE	2.00	3.50
woo		<u> </u>
PU/LD BHA		4.50
insp circ equip		3.50
TOTALS	24.00	400.50

	SUMMARY OF DAILY & CUMULATIVE C	OST	S					100
COST CODE	DESCRIPTION OF DAILY COSTS		DAILY (\$)		CUM (\$)		AFE (\$)	
2030.010	Land, Legal, Title, Survey, Arch, Damages, Permits, Signs	ļ		ļ				
2030.031	Dirtwork, Road, Location, Pits, Liner							
2030.019	Contract Drilling 9480 / day 392.5 / h cond 5071 26,000 mob sfc 36791	\$	9,480	\$	235,592			
2032.001	Water			\$	5,592			
2032.013	Drill Bits, Stabilizers, Reamers	<u> </u>		\$	42,500			
2031.046	Cementing and Services			\$	26,636			
2030.053	Coring and Analysis							
2030.052	Logging	1		<u>L</u> .				
2030.054	Mud Logging	\$	750	\$	3,750			
2030.037	Rental Equipment	\$	1,305	\$	30,190			
2030.028	Transportation			\$	8,842			
2032.004	Mud and Chemicals	\$	493	\$	28,661			
	Directional Services, Mud Motors			\$	106,512			
	Intermediate casing	ļ		\$	70,415			
2030.035	Contract Labor			\$	5,245			
2030.022	Engineering / Supervision	\$	800	\$	14,400			
2030.099	Intangible Miscellaneous and Contingencies				40.7%			
2040.001	Surface Casing			\$	17,790			
2040.004	Production Casing							
1011.000	Float Equipment, Shoes, Centralizers			\$	1,800			
1041.000	Wellhead Equipment	\perp		\$	9,971			
1073.000	Bottom Hole Pump / Gas Lift / Other							
1104.000	Drivehead, Engine / Motor and Hydraulic Pump / Electric Unit							
2040.052 / 2040.055	Valves and Fittings, Small / Large							
2040.067	Other Surface Equipment	1		L				
2040.099	Tangible Miscellaneous and Contingencies			_		<u> </u>		
	TOTAL COSTS	S	12,828	5	607,896	\$		

	18	Date:	09/03/04		D.A	ALY DR			RT						Page 2
			Well N	ame:	v	Je	nsen 1-18 Bl	T RECOR	D		<u> </u>	. –	<u> </u>		
BIT	BIT	T		T		DEPTH	DEPTH	FOOTAGE	CUM BIT				BIT		IT GRADING
NO.	SIZE			SERIAL	JETS	IN	ост	DRILLED	HOURS	ROP	WOB	RPM	TORQUE	In Out Dull I or	Seals Gge Dull Oth
(*)	(in)	MFG	TYPE XL 18N	754840	(32/32/32) 14 / 14 / 14 / 1	(R) 6 494	1,799	(ft) 1,305	(hrs) 102.75	(f/hr) 12.7	36 - 43	MTR/TBL 45 / 60	(ft -16s) 2100 - 2900		
2	12 1/4	Security Security	XL43	10408516	18 / 18 / 18	1,799	2,698	899	83.25	10.8	35 - 40	45 / 45-70	1400 - 2200		FEF 1/8 BT ROP
3	12 1/4	Smith	F4	MT6085	18 / 18 / 18	2,698	3,522	824	83.25	9.9	35 - 40	45 / 60	1600 - 2550	8 8 WT ALL	EEE1/2 RG TORQ
4	7 7/8	Smith	F57YOD	MT2530	12 / 13 / 12	3,522	3,655	133	12.25	10.9 #DIV/0!	23 - 25	55 - 60	1800 - 2200		
		··		+				0		#DIV/0!					
						İ		0		#DIV/0!				L	
COM	IMENTS	Bits 1,2&3 will	mud motor and d	irectional tools											
	TAL EQUIP								EXTERNAL	CASING L	TAC		TOP	BOTTOM	Nation 1
RENTAL	COSTS	COSTS		SIZE	WEIGHT	GRADE	CONIN	DRIFT ID	COLLAPSE	YIELD	CAPACITY	LENGTH	SET AT	SET AT	
1112	(5)	(5)				1.6-11-1			(psl)	(psi)	(PPIE/E)	(ft)	(ft)	(# KB)	k (h. 6 <u>. jilonet, h</u>
Living Otrs	\$ 315			30"	NA .	NA ISS		10.450	4.420	2,730	0.15450	40.00 500.00	2.00	40.00 498.00	
rac Tank	\$ 45 \$ 60			13 3/8" 8 5/8"	54.5 32	J55 J55	ST&C ST&C	12.459 7.796	1,130 2,530	3,930	0.06090	3,545.00	0.00	3,520.00	
orklift ortajohn	\$ 20			0 0.0											
lud Trailer	\$ 50								оттомно	I E ASSE	MDIV		17.7%	95.	
lud Cleaner DR	\$ 375 \$ 100			1910		L			OT TOMAC	MAXIMUM	MINIMUM				
utodniler	\$ 90		100					THRE	AD SIZE	0.D	۵۱	LENGTH		HRS SINCE	
U mud clnr		\$ 375	DE	SCRIPTION OF	ВНА	PRO		вох	PIN	(in)	(in)	(4)	HOURS RUN	INSPECTION	288
nli collars	\$ 250	\$ 5,585 \$ 4,250	-	Bit Bit sub		Sn R	nith in	4 1/2 R	4 1/2 R 4 1/2 XH	7.875 6.250	2.500	1.00 2.90	12.25 12.25	12.25	
hock Sub ther	250	4,250		Bit sub Briffith Shock	Sub		idle	4 1/2 XH	4 1/2 XH	6.500	6.375	10.03	12.25	12.25	
ther		[<u> </u>	17	- 6 1/2" Drill C	Collars	R	ig	4 1/2 XH	4 1/2 XH	6,500	2.313	525.85	12.25	12.25	
ther .	-	 		2 - 4 1/2" HW	DP	R	ıg	4 1/2 XH	4 1/2 XH	4,500	2.875	61.78	12.25	12.25	-
ther ther	+	 													
ther															
ther TOTAL S	\$ 1,305	\$ 30,190				 			-						
TOTALS	1.305	4 30,180					npii i iii	G MUD R	EDODT	Jagas er			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	# 896, T. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	val 1989. Dir
SAMPLE	110000	MUO	PUNNEL			GEL	FRITRATE	O INIOD K	CAKE		SAND		Maria Pi	The second	
DEPTH	TIME	WT.	VISCOSITY	PV/YP	KCL.	STRENGTH (Ib/100 ft2)	API (ml/30 min)	CALCIUM (npm)	THICKNESS (/32 in)	50UD5 (% vol)	CONTENT (% vol)	pН	CHLORIDES (ppm)	ALKALINITY Pf/Mf	LCM lb/gal
3,530	(hh:mm) 18:30	(ppg) 8.30	(sec/qt) 26	1/0	(%)	0/0	NC NC	(ppm) 40	NC	0.0	0	7.5	2,800	0 / 4.4	Bicarbs 5368 mg / L
					<u> </u>	<u> </u>					L				L
						DA	ILY MUD	COST & I	NVENTOR	Υ	100000000000000000000000000000000000000				TOTAL
			BARITE	QUICK GEL	CAUSTIC	LIME	SODA ASH	UNIDRILL	SOLKWICK	PACR	PHPA	CEDAR	TRUCKING		costs
			(**)	(sx)	(9×.)	(sx)	(sx)	(\$×)	(sx.)	(EX.)	(g≥)	(sx)	(S)		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
INIT COST												1		X/////////////////////////////////////	
			120								1			X ////////////////////////////////////	
			120								1				
NVENTORY R	ECEVED 4 HOURS		120												
NVENTORY R ISED LAST 24 INDING INVEY	ECEVED 4 HOURS NTORY		120												43
NVENTORY R ISED LAST 24 NDING INVEN DAILY MUD CO	ECEVED 4 HOURS NTORY	т	120												28,16
WENTORY R ISED LAST 24 INDING INVER IAILY MUD CO REVIOUS CU	ECEVED 4 HOURS NTORY OST MULATIVE COS	т	120												28,16
WENTORY R SED LAST 24 NDING INVEN IAILY MUD CO REVIOUS CU	LECEIVED A HOURS INTORY OST MULATIVE COS MUD COST							GGER RI							28,16
WENTORY R SED LAST 24 NDING INVEN IAILY MUD CO REVIOUS CU	ECEVED 4 HOURS NTORY OST MULATIVE COS		120 SHOWINTE	SRVAL TO	RATE	OF PENETRATI			ÉPORT SHOW GAS DA DUFUNG	A AFTER	Formation T	ops:		2100' Castleg.	28,16 28,66
WENTORY R ISED LAST 24 INDING INVER IAILY MUD CO REVIOUS CU LIMULATIVE BACK GROUND	LECEIVED A HOURS INTORY OST MULLATIVE COS MUD COST	Units)	SHOWINTE				ON		SHOW GAS DA				Blackhawk	3420'	28,16 28,66
WENTORY R SED LAST 24 NDING INVER AILY MUD CO REVIOUS CU UMULATIVE MUE BACK	MECBIVED A HOURS INTORY OST MULATIVE COS MUD COST GAS DATA (In)	Units) TRIP	SHOW INTE	70	BEFORE	DURING	ON AFTER	BEFORE	SHOW GAS DA DURING	AFTER	Formation 1 Sample perc	centages:	Blackhawk		28,16 28,66
WENTORY R SED LAST 24 NDING INVER AILY MUD CO REVIOUS CU UMULATIVE BACK GROUND	MECBIVED A HOURS INTORY OST MULATIVE COS MUD COST GAS DATA (In)	Units) TRIP	SHOW INTE	70	BEFORE	DURING	ON AFTER	BEFORE	SHOW GAS DA DURING	AFTER	Sample per	centages:	Blackhawk Sh & Sitst I	3420'	28,16 28,66 ate 3110' race Coal
WENTORY R SED LAST 24 NDING INVER AILY MUD CO REVIOUS CU UMULATIVE BACK GROUND	MECBIVED A HOURS INTORY OST MULATIVE COS MUD COST GAS DATA (In)	Units) TRIP	SHOW INTE	70	BEFORE	DURING	ON AFTER	BEFORE	SHOW GAS DA DURING	AFTER	Sample per	centages:	Blackhawk Sh & Sitst I	3420' 80%; Ss 20%; I	28,16 28,66 ate 3110' race Coal
WENTORY R ISED LAST 24 INDING INVER IAILY MUD CO REVIOUS CU LIMULATIVE BACK GROUND	MECBIVED A HOURS INTORY OST MULATIVE COS MUD COST GAS DATA (In)	Units) TRIP	SHOW INTE	70	BEFORE	DURING	ON AFTER	BEFORE UNITS	SHOW GAS DA DURING UNITS	AFTER	Sample per	centages:	Blackhawk Sh & Sitst I	3420' 80%; Ss 20%; I	28,16 28,66 ate 3110' race Coal
MENTORY R SED LAST 24 NDING INVER AREVIOUS CU MULA ATIVE BACK GROUND 10-30 Diepth	ECDVED HOURS NTORY OST MALLATIVE COS MUD COST CONN GAS Deviation	Units) TRIP GAS Azimuth	SHOWINTE FROM (8)	To (%)	BEFORE (N)	DURING (R) Azimuth	DEVIAT	BEFORE UNITS ION SUI	SHOW GAS DA DUFUNG UNITS RVEYS Deviation	AFTER UNITS	Sample percentage of the Sample Description of the Sample Description of the Sample DL Angle	centages: Iption:	Blackhawk Sh & Sitst I minor gas i	3420' 80%; Ss 20%; fincreases of up	28,16 28,66 ate 3110' race Coal D to 140u DL Angle
MENTORY R SED LAST 24 SED LAST 24 NOING INVERTIGATION REVIOUS COMMUNICATIVE MUE BACK GROUND 10-30 Dispth 538	ECDVED HOURS NTORY OST MAIL ATIVE COS GAS DATA (in CONN GAS Deviation 1.03	Units) TRIP GAS Azimuth 134.79	SHOW INTE FROM (6)	Depth 1407	Deviation 0.69	Azimuth 190.80	DEVIAT DL Angle 1.35	DEFORE UNITS ION SUI Depth 2244	Deviation 2.27	AFTER LINETS Azimuth 147.80	Sample percisample Descri	Depth 3103	Blackhawk Sh & Sitst i minor gas i Deviation	3420' 80%; Ss 20%; I increases of u Azimuth 174.90	28,16 28,60 ate 3110' race Coal b to 140u DL Angle 0,96
MENTORY R SED LAST 24 NDING INVER AREVIOUS CU MULA ATIVE BACK GROUND 10-30 Diepth	ECDVED HOURS NTORY OST MALLATIVE COS MUD COST CONN GAS Deviation	Units) TRIP GAS Azimuth	SHOWINTE FROM (8)	To (%)	BEFORE (N)	DURING (R) Azimuth	DEVIAT	BEFORE UNITS ION SUI	SHOW GAS DA DUFUNG UNITS RVEYS Deviation	AFTER UNITS	Sample percentage of the Sample Description of the Sample Description of the Sample DL Angle	centages: Iption:	Blackhawk Sh & Sitst I minor gas i	3420' 80%; Ss 20%; fincreases of up	28,16 28,66 ate 3110' race Coal D to 140u DL Angle 0,96 0,14 0,42
MENTORY R SED LAST 24 SED LAST	ECDVED HOURS NTORY OST AMALATIVE COS GAS DATA (in CONN GAS Deviation 1.03 1.22 1.20 1.25	Azimuth 184.79 199.53 186.67	SHOW INTE FROM (b) DL Angle 0.19 0.76 0.17 0.21	Depth 1407 1438 1468 1499	Deviation 0.68 0.75 0.73	Azimuth 190.80 190.50 201.30 218.50	DEVIAT DL Angle 1.35 0.39 0.47 0.83	Depth 2244 2275 2306 2337	RVEYS Deviation 2.27 2.24 2.06 2.05	AFTER UNITS Azimuth 147.80 156.50 158.70 157.60	Sample perc Sample Description of the Control of th	Depth 3103 3165 3196	Blackhawk Sh & Sitst I minor gas Deviation 1.06 1.02 1.15 1.26	3420' 80%; Ss 20%; I increases of u Azimuth 174.90 175.60 174.00 167.30	28,11 28,60 ate 3110' race Coal b to 140u DL Angle 0,96 0.14 0.42 0.55
MENTORY R SED LAST 24 SED LAST	ECDVED HOURS NTORY OST AMULATIVE COS GAS DATA (in In In In In In In In In In In In In In	Asimuth 194.79 189.53 186.67 180.49	SHOWINTE FROM (N) DL Angle 0.19 0.76 0.17 0.21 0.66	Depth 1407 1438 1468 1499 1532	Deviation 0.69 0.75 0.73 0.84 0.51	Azimuth 190.80 190.50 201.30 218.50 206.70	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08	Depth 2244 2275 2306 2337 2367	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95	AFTER UNITS Azimuth 147.80 156.50 159.70 157.60 163.20	DL Angle 0.66 1.11 0.64 0.13 0.73	Depth 3103 3165 3196 3226	Blackhawk Sh & Sitst minor gas	3420' 80%; Ss 20%; tincreases of up	28,16 28,66 ate 3110' race Coal 5 to 140u DL Angle 0.96 0.14 0.42 0.55 0.66
MENTORY R SED LAST 24 SED LAST	ECDVED HOURS NTORY OST AMULATIVE COS MUD COST CONN GAS Deviation 1.03 1.22 1.20 1.25 1.34 1.26	Asimuth 194.79 185.91 180.99 180.29	SHOW INTE FROM (b) DL Angle 0.19 0.76 0.17 0.21	Depth 1407 1438 1468 1499 1532 1563	Deviation 0.69 0.75 0.73 0.84 0.51 0.83	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13	Depth 2244 2275 2306 2337	RVEYS Deviation 2.27 2.24 2.06 2.05	AFTER UNITS Azimuth 147.80 156.50 158.70 157.60	Sample perc Sample Description of the Control of th	Depth 3103 3165 3196	Blackhawk Sh & Sitst I minor gas Deviation 1.06 1.02 1.15 1.26	3420' 80%; Ss 20%; I increases of u Azimuth 174.90 175.60 174.00 167.30	28,16 28,66 ate 3110' race Coal b to 140u DL Angle 0,96 0.14 0.42 0.55
MENTORY R SED LAST 24 SED LAST	ECDVED HOURS NTORY OST AMULATIVE COS GAS DATA (in In In In In In In In In In In In In In	Asimuth 194.79 189.53 186.67 180.49	SHOWINTE FROM (N) DL Angle 0.19 0.76 0.17 0.21 0.68 0.68	Depth 1407 1438 1468 1499 1532	Deviation 0.69 0.75 0.73 0.84 0.51	Azimuth 190.80 190.50 201.30 218.50 206.70	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08	Depth 2244 2275 2306 2337 2367 2399	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.42 0.96	Azimuth 147.80 156.50 157.60 163.20 170.10 171.70	Sample perc	Depth 3103 3165 3196 3226 3238 3320	Blackhawk Sh & Sist I minor gas i Deviation 1.08 1.02 1.15 1.26 1.45 1.49 1.40	3420' 80%; Ss 20%; I increases of ul Azimuth 174.90 175.60 167.30 169.60 165.50 155.00	28,11 28,60 ate 3110' race Coal 5 to 140u DL Angle 0.98 0.14 0.42 0.55 0.66 0.40 0.82 0.31
MENTORY R SED LAST 24 SED LAST	ECDVED HOURS NOTORY OST MULL TO THE CONNING AS DATA (In In In In In In In In In In In In In I	Azimuth 194.79 180.91 180.99 175.88 164.40 162.92	SHOW INTE FROM (N) DL Angle 0.19 0.76 0.17 0.21 0.88 0.26 0.36 0.59	Depth 1407 1438 1468 1532 1563 1595 1626 1657	Deviation 0.68 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 196.70	DEVIAT (8) DEVIAT DL Angle 1.35 (9) 0.47 (9) 1.13 (1.08 (1.13 (9.29 (9.47 (9.48 (1.13 (9.48 (1.13 (9.48 (1.13 (9.48 (1.13 (9.48 (1.13 (9.48 (1.13 (9.48 (1.13 (9.48 (1.13 (9.48 (1.13 (9.48 (1.13 (9.48 (1.13 (9.48 (1.13 (1.	Depth 2244 2275 2306 2337 2367 2399 2429 2460 2492	RVEYS RVEYS Peviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.98 0.98	Astmuth 147.80 156.50 157.70 170.70 170.10 171.90	Sample perc	Depth 3103 3135 3196 3228 3257 3283 3320 3350	Blackhawk Sh & Slist I minor gas i minor gas i 1.06 1.02 1.15 1.45 1.33 1.40 1.38	3420' 80%; Ss 20%; I increases of up Azimuth 174.90 175.60 174.00 167.30 169.60 165.50 155.00 152.00	28,16 28,66 ate 3110' race Coal DL Angle 0,96 0,14 0,42 0,55 0,66 0,40 0,82 0,31 0,54
MENTORY R SED LAST 24 SED LAST	Deviation 1.03 1.22 1.24 1.34 1.33 1.34 1.33 1.48 1.40 1.40 1.34 1.	Azimuth 184.79 195.53 186.91 180.49 175.88 164.40 162.92 175.82	SHOW INTE FROM (N) DL Angle 0.19 0.76 0.17 0.21 0.86 0.26 0.36 0.39 0.12 0.68	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1658	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00	Azimuth: 190.80 190.50 201.30 218.50 206.70 194.00 187.20 196.70 202.10	DEVIAT DL Angle 1.35 0.47 0.33 1.03 1.13 0.29 0.43 1.29 0.65	BEFORE UNITS ION SUI Depth 2244 2275 2306 2337 2367 2399 2429 2460 2492 2523	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.22 0.98 0.98 0.99 1.91	Azimuth 147.80 156.50 156.50 157.60 163.20 170.70 170.10 171.70 171.20	Sample Person Sample Description	Depth 3103 3133 3165 3226 3257 3283 3320 3350 3381	Blackhawk Sh & Slist I minor gas i minor gas i 1.08 1.02 1.15 1.26 1.45 1.33 1.40 1.40 1.40 1.38	3420' 80%; Ss 20%; I increases of u Azimuth 174.90 175.60 174.00 167.30 169.60 155.50 155.00 159.00 154.50	28,16 28,66 ate 3110' race Coal D to 140u DL Angle 0,96 0,14 0,42 0,55 0,66 0,40 0,82 0,31 0,54 0,79
MENTORY R SED LAST 24 SED LAST	ECDVED HOURS NOTORY OST MULL TO THE CONNING AS DATA (In In In In In In In In In In In In In I	Azimuth 194.79 180.91 180.99 175.88 164.40 162.92	SHOW INTE FROM (N) DL Angle 0.19 0.76 0.17 0.21 0.88 0.26 0.36 0.59	Depth 1407 1438 1468 1532 1563 1595 1626 1657	Deviation 0.68 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 196.70	DEVIAT (8) DEVIAT DL Angle 1.35 (9) 0.47 (9) 1.13 (1.08 (1.13 (9.29 (9.47 (9.48 (1.13 (9.48 (1.13 (9.48 (1.13 (9.48 (1.13 (9.48 (1.13 (9.48 (1.13 (9.48 (1.13 (9.48 (1.13 (9.48 (1.13 (9.48 (1.13 (9.48 (1.13 (9.48 (1.13 (1.	Depth 2244 2275 2306 2337 2367 2399 2429 2460 2492	RVEYS RVEYS Peviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.98 0.98	Astmuth 147.80 156.50 157.70 170.70 170.10 171.90	Sample perc	Depth 3103 3135 3196 3228 3257 3283 3320 3350	Blackhawk Sh & Slist I minor gas i minor gas i 1.06 1.02 1.15 1.45 1.33 1.40 1.38	3420' 80%; Ss 20%; I increases of up Azimuth 174.90 175.60 174.00 167.30 169.60 165.50 155.00 152.00	28,16 28,66 ate 3110' race Coal DL Angle 0,96 0,14 0,42 0,55 0,66 0,40 0,82 0,31 0,54
Depth 538 664 695 727 757 817 844 876 907	Deviation 1.03 1.22 1.26 1.32 1.34 1.33 1.48 1.43 0.64 0.71	Azimuth 134.79 195.53 186.97 180.49 100.29 175.88 164.40 162.92 175.82 143.19 137.08 130.59	SHOWINTE FROM (N) 0.19 0.76 0.17 0.21 0.88 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1688 1720 1751 1752	Deviation 0,69 0,75 0,73 0,84 0,51 0,83 0,85 0,81 1,20 1,00 0,88 0,84 0,93	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 198.70 202.10 179.00 157.60 164.00	DEVIAT OL Angle 1.35 0.39 0.47 0.83 1.08 1.03 0.29 0.43 1.29 0.43 1.29 1.29 1.20 1.23 1.04 0.43	Depth 2244 2275 2306 2337 2367 2429 2450 2452 2553 2554 2614	RVEYS Devlation 2.27 2.24 2.06 2.05 1.95 1.22 0.98 0.96 0.99 1.23 1.10 1.30	Azimuth 147.80 155.50 155.70 157.60 163.20 170.70 170.10 171.70 171.20 170.60 163.70 163.70	DL Angle DE Angle O.86 O.86 O.86 O.87 O.87 O.84 O.01 O.17 O.17 O.82 O.87 O.84 O.01 O.17 O.82 O.83 O.84 O.84 O.85	Depth 3103 3135 3196 3226 3257 3288 3320 3351 3413 3413 3472	Blackhawk Sh & Slist I minor gas i minor gas i 1.08 1.08 1.02 1.15 1.26 1.45 1.40 1.40 1.40 1.12 1.09 1.15	3420' 80%; Ss 20%; I increases of up Azimuth 174.90 175.60 167.30 169.60 155.00 159.00 152.50 154.50 159.80	28,16 28,66 ate 3110' race Coal 5 to 140u DL Angle 0.96 0.14 0.42 0.55 0.66 0.40 0.82 0.31 0.54 0.79 0.33
MENTORY R SED LAST 24 SED LAST	Deviation CON	Azimuth 154.79 195.53 156.87 188.91 150.49 159.29 175.88 164.40 162.92 143.19 137.05 130.59 112.85	SHOW INTE FROM (N) DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 1.88 0.129 1.08	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1688 1720 1751 1782 1613	Deviation 0.88 0.75 0.73 0.84 0.51 0.83 0.81 1.20 1.00 0.88 0.44 1.12	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 195.70 202.10 202.10 179.00 157.60 164.00 144.00	DEVIAT (8) DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.23 1.04 0.43 1.26 1.23 1.06	Depth 2244 2275 2306 2337 2367 2399 2429 2450 2553 2554 2584 2644	RVEYS	Arren Leats 147.80 156.50 155.70 157.60 163.20 170.10 171.70 171.90 171.00 183.70 157.40 157.40	Sample per	Depth 3103 3133 3165 3196 3226 3257 3250 3350 3351 3413 3443 3447 3503	Blackhawk Sh & Sits I minor gas i minor gas i 1.06 1.02 1.15 1.26 1.45 1.30 1.40 1.40 1.30 1.12 1.09 1.16 1.34	3420' 80%; Ss 20%; I increases of up Azimuth 174.90 175.60 174.00 167.30 169.60 165.50 155.00 152.50 154.50 159.00 160.20	28,11 28,60 ate 3110' race Coal DL Angle 0.98 0.14 0.42 0.55 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
NENTORY R SED LAST 24	Deviation	Asimuth 194.79 180.89 180.89 180.89 180.99 180.29 175.88 164.40 192.92 195.82 143.19 137.08 130.59 112.85 107.94	SHOWINTE FROM (N) 0.19 0.76 0.17 0.21 0.88 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1688 1720 1751 1752	Deviation 0.69 0.75 0.75 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05	Azimuth. 190.80 190.50 201.30 215.50 290.70 194.00 187.20 196.70 202.10 197.00 157.60 149.00 149.00 149.00	DEVIAT OL Angle 1.35 0.39 0.47 0.83 1.08 1.03 0.29 0.43 1.29 0.43 1.29 1.29 1.20 1.23 1.04 0.43	Depth 2244 2275 2306 2337 2367 2429 2450 2452 2553 2554 2614	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.96 0.96 0.91 1.23 1.10 1.30 1.56	Azimuth 147.80 155.50 155.70 157.60 163.20 170.70 170.10 171.70 171.20 170.60 163.70 163.70	DL Angle DE Angle O.86 O.86 O.86 O.87 O.87 O.84 O.01 O.17 O.17 O.82 O.87 O.84 O.01 O.17 O.82 O.83 O.84 O.84 O.85	Depth 3103 3135 3196 3226 3257 3288 3320 3351 3413 3413 3472	Blackhawk Sh & Slist I minor gas i minor gas i 1.08 1.08 1.02 1.15 1.26 1.45 1.40 1.40 1.40 1.12 1.09 1.15	3420' 80%; Ss 20%; I increases of up Azimuth 174.90 175.60 174.00 167.30 169.60 165.50 155.00 152.50 154.50 159.00 160.20	28,16 28,66 ate 3110' race Coal DL Angle 0,96 0,14 0,42 0,55 0,66 0,40 0,82 0,31 0,54 0,79 0,33 0,23
MENTORY R SED LAST 24 NESSED LAST 24 NESSED LAST 24 NESSED LAST 24 NESSED LAST 24 NESSED LAST 24 NESSED LAST 24 NESSED LAST 24 NESSED LAST 25	Deviation CON	Azimuth 184.79 195.53 165.91 180.49 180.29 175.88 164.40 162.92 175.82 143.19 137.08 130.59 112.85 107.94	SHOW INTE FROM (N) DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 1.85 0.51 0.95 1.04 0.65 0.65	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1688 1720 1751 1762 1613 1844 1844 1844 1906	Deviation 0.89 0.75 0.73 0.84 0.51 0.85 0.81 1.20 0.85 0.84 1.120 1.00 0.88 0.94 1.12 1.05 1.118 1.30	Azimuth 190.80 190.50 201.30 218.50 196.70 197.00 157.60 149.00 1	DEVIAT DL Angle 1.35 0.39 0.47 1.08 1.10 1.29 0.43 1.29 0.45 0.45 0.55 0.55 0.55 0.55 0.55 0.55	Depth 2244 2275 2306 2337 2367 2392 2429 2460 2492 2523 2553 2554 2614 2644 2672 2703 2734	RVEYS Deviation 2.27 2.24 2.06 1.95 1.49 0.96 0.96 1.23 1.10 1.60 1.58 1.66 1.68	Arren Leats 147.80 156.50 155.70 157.60 163.20 170.10 171.70 171.90 171.00 183.70 155.40 163.70 163.10 177.10	Sample person Sample Description	Depth 3103 3133 3165 3196 3226 3257 3250 3350 3351 3413 3443 3447 3503	Blackhawk Sh & Sits I minor gas i minor gas i 1.06 1.02 1.15 1.26 1.45 1.30 1.40 1.40 1.30 1.12 1.09 1.16 1.34	3420' 80%; Ss 20%; I increases of up Azimuth 174.90 175.60 174.00 167.30 169.60 165.50 155.00 152.50 154.50 159.00 160.20	28,16 28,66 ate 3110' race Coal DL Angle 0,96 0,14 0,42 0,55 0,66 0,40 0,82 0,31 0,54 0,79 0,33 0,23
MENTORY R SED LAST 24 NORMAL AT IVE BACK GROUND 10-30 Depth 10-30 Depth 538 566 602 633 664 695 727 787 817 817 814 376 907 936 971 1034 1036 1097	Deviation CON	Asimuth 194.79 180.89 180.89 180.89 180.89 180.99 180.29 175.88 164.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.70	SHOWINTE FROM (N) 0.19 0.78 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.65	Depth 1407 1438 1498 1532 1563 1595 1626 1657 1751 17752 11613 1844 1375 1995 1935	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.18 1.30 1.75	Azimuth 190.80 190.50 201.30 215.50 194.00 157.60 156.00 155.00 1	DEVIAT (8) DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.03 1.29 0.43 1.29 0.65 1.23 1.04 0.43 1.06 0.59 0.83 0.54 1.59	Depth 2244 2275 2306 2337 2367 2399 2429 2450 2492 2523 2554 2614 2672 2703 2734 2764 2764	RVEYS Deviation 2.27 2.24 2.08 2.05 1.95 1.48 1.22 0.98 0.98 0.91 1.23 1.10 1.30 1.58 1.66 1.82 1.77	Armuth 147.80 156.50 156.50 157.60 163.20 170.70 171.90 171.90 171.20 163.70 163.70 163.10 173.70	Sample person Sample Description	Depth 3103 3133 3165 3196 3226 3257 3250 3350 3351 3413 3443 3447 3503	Blackhawk Sh & Sits I minor gas i minor gas i 1.06 1.02 1.15 1.26 1.45 1.30 1.40 1.40 1.30 1.12 1.09 1.16 1.34	3420' 80%; Ss 20%; I increases of up Azimuth 174.90 175.60 174.00 167.30 169.60 165.50 155.00 152.50 154.50 159.00 160.20	28,16 28,66 ate 3110' race Coal DL Angle 0,96 0,14 0,42 0,55 0,66 0,40 0,82 0,31 0,54 0,79 0,33 0,23
Depth 538 566 602 633 664 695 727 757 817 847 8907 936 971 1034 1066 1097 1128	Deviation 1.03 1.22 1.25 1.34 1.43 1.43 1.43 1.43 1.40 1.00 1.	Asimuth 184.79 189.53 186.87 186.87 186.87 187.88 194.40 192.92 175.88 194.40 192.92 175.80 1120.93 1120.93 1120.93 1120.93 1120.93 1120.93 1120.93 1120.93 1120.93 1120.93 1120.93 1120.93 1120.93 1120.93 1120.93 1120.93	SHOW INTE FROM (N) DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 1.85 0.51 0.95 1.04 0.65 0.65	Depth 1407 1438 1488 1499 1552 1563 1595 1626 1857 1751 1782 1813 1844 1875 1906 1996 1967	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.35 0.85 0.81 1.20 1.00 0.88 0.93 1.12 1.10 1.10 1.11 1.13 1.130 1.75 1.70	Azimuth. 190.80 190.50 201.30 218.50 206.70 194.00 187.20 196.70 202.10 179.00 164.00 146.50 146.50 156.00 161.00	DEVIAT OL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.06 0.50	Depth 2244 2275 2396 2499 2429 2523 2553 2564 2614 2644 2703 2734 2734 2734 2826	RVEYS Devlation 2.27 2.24 2.06 2.05 1.95 1.22 0.98 0.99 1.10 1.30 1.60 1.50 1.60 1.52 1.77	Azimuth 147.80 156.50 158.70 157.60 163.20 170.70 171.90 171.20 170.50 183.70 157.40 163.20 163.20 163.20 170.70 171.70 171.70 171.70 171.70 171.70 171.70 171.70 171.70 171.70 171.70 173.70	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.80 1.20 0.18 0.43 1.02 0.25 0.79	Depth 3103 3133 3165 3196 3226 3257 3250 3350 3351 3413 3443 3447 3503	Blackhawk Sh & Sits I minor gas i minor gas i 1.06 1.02 1.15 1.26 1.45 1.30 1.40 1.40 1.30 1.12 1.09 1.16 1.34	3420' 80%; Ss 20%; I increases of up Azimuth 174.90 175.60 174.00 167.30 169.60 165.50 155.00 152.50 154.50 159.00 160.20	28,16 28,66 ate 3110' race Coal DL Angle 0,96 0,14 0,42 0,55 0,66 0,40 0,82 0,31 0,54 0,79 0,33 0,23
MENTORY R SED LAST 24 SED LAST 24 SED LAST 24 SED LAST 24 SED LAST 24 SED LAST 24 SED LAST 24 SED LAST 24 SED LAST 24 SED LAST 24 SED LAST 24 SED LAST 24 SED LAST 25 SED LAST	Deviation CON	Asimuth 194.79 180.89 180.89 180.89 180.89 180.99 180.29 175.88 164.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.70	SHOWINTE FROM (N) DL Angle 0.19 0.78 0.17 0.21 0.68 0.26 0.36 0.59 0.12 0.68 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.53 0.62	Depth 1407 1438 1498 1532 1563 1595 1626 1657 1751 17752 11613 1844 1375 1995 1935	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.18 1.30 1.75	Azimuth 190.80 190.50 201.30 215.50 194.00 157.60 156.00 155.00 1	DEVIAT (8) DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.03 1.29 0.43 1.29 0.65 1.23 1.04 0.43 1.06 0.59 0.83 0.54 1.59	Depth 2244 2275 2306 2337 2367 2399 2429 2450 2492 2523 2554 2614 2672 2703 2734 2764 2764	RVEYS Deviation 2.27 2.24 2.08 2.05 1.95 1.48 1.22 0.98 0.98 0.91 1.23 1.10 1.30 1.58 1.66 1.82 1.77	Armuth 147.80 156.50 156.50 157.60 163.20 170.70 171.90 171.90 171.90 163.70 165.40 163.70 165.40 163.70 165.40 163.70	Sample person Sample Description	Depth 3103 3133 3165 3196 3226 3257 3250 3350 3351 3413 3443 3447 3503	Blackhawk Sh & Sits I minor gas i minor gas i 1.06 1.02 1.15 1.26 1.45 1.30 1.40 1.40 1.30 1.12 1.09 1.16 1.34	3420' 80%; Ss 20%; I increases of up Azimuth 174.90 175.60 174.00 167.30 169.60 165.50 155.00 152.50 154.50 159.00 160.20	28,16 28,66 ate 3110' race Coal DL Angle 0,96 0,14 0,42 0,55 0,66 0,40 0,82 0,31 0,54 0,79 0,33 0,23
MEMORY R SEPLAST 24 NORMS INVESTIGATION OF THE PROPERTY OF THE	Deviation CON	Asimuth 184.79 189.53 186.87 186.87 186.87 187.88 194.40 192.92 175.88 194.40 192.92 175.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 128.70 132.57 137.30	DL Angle 0.19 0.19 0.76 0.36 0.89 0.12 0.68 1.29 1.85 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.62	Depth 1407 1438 1468 1499 1552 1563 1595 1626 1657 1688 1720 1751 1782 1813 1844 1875 1906 1997 2028 2060	Deviation 0,69 0,75 0,73 0,84 0,51 0,83 0,85 0,81 1,20 1,00 0,88 0,93 1,12 1,05 1,18 1,30 1,75 1,70 1,61 1,91	Azimuth 190.80 190.50 201.30 215.50 209.70 194.00 187.20 196.70 202.10 202.10 179.00 146.50 146.00 146.50 155.00 161.00 155.40 164.20 164.20 164.20	DEVIAT OL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.85 1.23 1.06 0.63 1.06 0.53 0.54 1.59 0.83 1.159	Depth 2244 2275 2306 2337 2367 2399 2429 24523 2553 2553 2564 2614 2644 2672 2703 2734 2734 2734 2734 2734 2734 2734 273	RVEYS Devlation 2.27 2.24 2.06 2.05 1.95 1.95 1.22 0.98 0.99 1.12 1.30 1.60 1.50 1.60 1.52 1.77 1.73 1.60 1.82 1.72 1.73 1.80 1.90 0.90	Astmuth 147.80 156.50 158.70 157.60 163.20 170.70 171.90 171.20 171.20 163.20 163.20 175.40 163.40 163.40 163.10 177.10 178.90 184.00 196.10 191.00 205.80	DL Angle 0.66 1.11 1.07 0.62 0.87 0.84 0.01 0.17 1.07 0.62 0.80 1.20 0.18 0.45 1.02 0.25 0.79 0.94 1.01 0.72	Depth 3103 3133 3165 3196 3226 3257 3250 3350 3351 3413 3443 3447 3503	Blackhawk Sh & Sits I minor gas i minor gas i 1.06 1.02 1.15 1.26 1.45 1.30 1.40 1.40 1.30 1.12 1.09 1.16 1.34	3420' 80%; Ss 20%; I increases of up Azimuth 174.90 175.60 174.00 167.30 169.60 165.50 155.00 152.50 154.50 159.00 160.20	28,16 28,66 ate 3110' race Coal DL Angle 0,96 0,14 0,42 0,55 0,66 0,40 0,82 0,31 0,54 0,79 0,33 0,23
NENTORY R	Deviation CON	Azimuth 184.79 195.53 186.87 186.87 186.87 187.88 194.40 195.82 195.82 143.19 137.08 130.59 112.65 107.94 109.50 120.10 126.70 132.57 137.30 141.51 185.70 235.75	SHOW INTE FROM (N) DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 1.08 1.29 1.08 0.51 0.95 1.04 0.65 0.65 0.65 0.62 0.40 0.65 0.62	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1688 1720 1751 1782 1613 1844 1835 1906 1935 1967 2028 2028 2091	Deviation 0.88 0.75 0.73 0.84 0.51 0.85 0.81 1.20 1.00 0.88 0.94 1.12 1.05 1.18 1.30 1.75 1.76 1.79 1.61 1.91 1.88	Azimuth 190.80 190.50 201.30 218.50 196.70 194.00 155.00 155.00 155.40 154.00 155.40 155.20 155.20 155.20 155.40 155.20 155.20 155.40 155.20 155.20 155.40 155.20 155.40 155.20 155.40 155.20 155.40 155.20 155.20 155.40 155.20 155.20 155.20 155.40 155.20 155.20 155.20 155.40 155.20 1	DEVIAT DL Angle 1.35 0.39 0.47 1.08 1.108 1.123 1.06 0.59 0.43 1.29 0.43 1.29 0.43 1.29 0.43 1.29 0.43 1.29 0.43 1.29 0.43 1.29 0.43 1.29 0.43 1.29 0.43 1.29 0.43 1.29 0.43 1.29 0.43 1.29 0.43 1.29 0.43 1.29 0.43 1.29 0.43 1.20 0.33 0.54 1.59 0.33 0.54 1.59 0.33 0.54 1.59 0.39 1.12 0.59 0.39	Depth 2244 2275 2306 2337 2367 2429 2460 2492 2523 2553 2584 2614 2647 2703 2734 2764 2826 2856 2857 2919 2951	RVEYS Deviation 2.27 2.24 2.06 1.95 1.48 2.05 1.95 1.48 1.22 0.98 0.96 1.23 1.10 1.30 1.60 1.58 1.82 1.77 1.30 1.60 1.58 1.82 1.77 1.30 1.00 0.90 0.90	Arren Leasts 147.80 156.50 155.70 157.60 163.20 170.10 171.70 171.90 171.90 171.00 183.70 163.40 163.70 163.10 177.10 179.90 184.00 185.40 185	Sample person Sample Description	Depth 3103 3133 3165 3196 3226 3257 3250 3350 3351 3413 3443 3447 3503	Blackhawk Sh & Sits I minor gas i minor gas i 1.06 1.02 1.15 1.26 1.45 1.30 1.40 1.40 1.30 1.12 1.09 1.16 1.34	3420' 80%; Ss 20%; I increases of up Azimuth 174.90 175.60 174.00 167.30 169.60 165.50 155.00 152.50 154.50 159.00 160.20	28,16 28,66 ate 3110' race Coal DL Angle 0.96 0.14 0.42 0.55 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
MEMORY R SEPLAST 24 NORMS INVESTIGATION OF THE PROPERTY OF THE	Deviation CON	Asimuth 184.79 189.53 186.87 186.87 186.87 187.88 194.40 192.92 175.88 194.40 192.92 175.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 128.70 132.57 137.30	DL Angle 0.19 0.19 0.76 0.36 0.89 0.12 0.68 1.29 1.85 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.62	Depth 1407 1438 1468 1499 1552 1563 1595 1626 1657 1688 1720 1751 1782 1813 1844 1875 1906 1997 2028 2060	Deviation 0,69 0,75 0,73 0,84 0,51 0,83 0,85 0,81 1,20 1,00 0,88 0,93 1,12 1,05 1,18 1,30 1,75 1,70 1,61 1,91	Azimuth 190.80 190.50 201.30 215.50 209.70 194.00 187.20 196.70 202.10 202.10 179.00 146.50 146.00 146.50 155.00 161.00 155.40 164.20 164.20 164.20	DEVIAT (N)	Depth 2244 2275 2306 2337 2367 2399 2429 24523 2553 2553 2564 2614 2644 2672 2703 2734 2734 2734 2734 2734 2734 2734 273	RVEYS Devlation 2.27 2.24 2.06 2.05 1.95 1.95 1.22 0.98 0.99 1.12 1.30 1.60 1.50 1.60 1.52 1.77 1.73 1.60 1.82 1.72 1.73 1.80 1.90 0.90	Astmuth 147.80 156.50 158.70 157.60 163.20 170.70 171.90 171.20 171.20 163.20 163.20 175.40 163.40 163.40 163.10 177.10 178.90 184.00 196.10 191.00 205.80	DL Angle 0.66 1.11 1.07 0.62 0.87 0.84 0.01 0.17 1.07 0.62 0.80 1.20 0.18 0.45 1.02 0.25 0.79 0.94 1.01 0.72	Depth 3103 3133 3165 3196 3226 3257 3250 3350 3351 3413 3443 3447 3503	Blackhawk Sh & Sits I minor gas i minor gas i 1.06 1.02 1.15 1.26 1.45 1.30 1.40 1.40 1.30 1.12 1.09 1.16 1.34	3420' 80%; Ss 20%; I increases of up Azimuth 174.90 175.60 174.00 167.30 169.60 165.50 155.00 152.50 154.50 159.00 160.20	28,16 28,66 ate 3110' race Coal DL Angle 0,96 0,14 0,42 0,55 0,66 0,40 0,82 0,31 0,54 0,79 0,33 0,23
MEMORY R SED LAST 24 NORM SED LAST 24 NORM SED LAST 24 NORM SED LAST 24 NORM SED LAST 24 NORM SED LAST 24 NORM SED LAST 24 NORM SED LAST 25 NO	Deviation CON	Azimuth 184.79 195.53 186.87 180.49 175.88 164.40 162.92 175.85 143.19 137.30 141.51 185.70 235.75 203.90 1773.03 1773.03	SHOW INTE FROM (N) DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 1.04 0.65 1.29 1.04 0.65 0.65 0.65 0.62 0.40 0.53 0.53 0.62 0.40 0.53 0.53 0.65 0.55 0.65 0.55	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1698 1720 1751 1762 1813 1844 1835 1906 1935 1997 2028 2060 2091 2120 2152 183	Deviation 0.88 0.75 0.73 0.84 0.51 0.85 0.81 1.20 1.00 0.88 0.84 1.120 1.100 1.105 1.118 1.30 1.75 1.76 1.79 1.61 1.81 1.88 1.91 1.88 1.95 1.74 1.99 2.03	Azimuth 190.80 190.50 201.30 218.50 196.70 194.00 157.60 164.00 155.00 165.00 165.00 165.40 164.20 155.20 164.60 165.40 164.60 165.40 1	DEVIAT DL Angle 1.35 0.39 0.47 1.08 1.103 1.29 0.43 1.29 0.43 1.29 0.43 1.29 0.45 1.23 1.06 0.59 0.33 1.08 1.11 1.20 0.30 0.54 1.59 0.30 0.54 1.59 0.30 0.54 1.59 0.30 0.59 0.30 0.50 0.30 0.50 0.30 0.50 0.30 0.50 0.30 0.3	Depth 2244 2275 2306 2337 2367 2397 2429 2460 2492 2523 2553 2554 2614 2644 2672 2703 2734 2764 2826 2856 2857 2919 2951 2981 3013 3042	RVEYS Deviation 2.27 2.24 2.06 1.95 1.49 1.22 0.98 1.22 1.10 1.80 1.80 1.80 1.80 1.80 1.80 1.80	Arren Leasts 147.80 156.50 155.70 157.60 163.20 170.10 171.70 171.90 171.90 171.90 171.90 183.70 165.40 163.70 168.10 177.10 175.40 168.10 177.10 179.90 184.00 185	Sample person Sample Description	Depth 3103 3133 3165 3196 3226 3257 3250 3350 3351 3413 3443 3447 3503	Blackhawk Sh & Sits I minor gas i minor gas i 1.06 1.02 1.15 1.26 1.45 1.30 1.40 1.40 1.30 1.12 1.09 1.16 1.34	3420' 80%; Ss 20%; I increases of up Azimuth 174.90 175.60 174.00 167.30 169.60 165.50 155.00 152.50 154.50 159.00 160.20	28,11 28,60 ate 3110' race Coal DL Angle 0.98 0.14 0.42 0.55 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
MENTORY R SED LAST 24 SED LAST 24 SED LAST 24 SED LAST 24 SED LAST 24 SED LAST 24 SED LAST 24 SED LAST 24 SED LAST 24 SED LAST 25 SED LAST	Devision Con	Asimuth. 194.79 159.53 185.91 180.49 180.49 180.29 175.88 164.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 128.70 132.57 137.30 141.51 165.70 235.75 203.90 173.03	SHOWINTE FROM (N) 0.19 0.19 0.76 0.21 0.68 0.26 0.36 0.89 0.12 0.68 1.29 1.85 0.51 0.95 1.04 0.65 0.62 0.62 0.62 0.63	Depth 1407 1438 1488 1499 1532 1563 1595 1626 1657 1688 1720 1751 1782 1813 1844 1875 1906 1997 2028 2080 2091 2120 2152	Deviation 0.68 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.93 1.12 1.05 1.18 1.30 1.75 1.70 1.61 1.91 1.88 1.95 1.74	Azimuth 190.80 190.50 201.30 218.50 201.30 187.20 194.00 187.20 196.70 202.10 107.00 157.60 146.00 148.50 152.00 161.00 155.40 164.20 154.10 155.20	DEVIAT OLAngle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.85 1.23 1.06 0.43 1.06 0.43 1.05 0.29 0.81 0.45 1.23 1.06 0.43 1.06 0.43 1.06 0.43 1.06 0.43 1.06 0.85 1.23 0.86	Depth 2244 2275 2309 2429 2452 2523 2553 2564 2614 2644 2672 2703 2734 2734 2826 2856 2856 2857 2919 2951 2981 3013	RVEYS Devlation 2.27 2.24 2.06 2.05 1.95 1.95 1.22 0.98 0.91 1.23 1.10 1.30 1.60 1.52 1.71 1.71 1.70 1.90 0.90 0.90 0.90 0.90	Astmuth 147.80 156.50 158.70 157.60 163.20 170.70 171.90 171.20 170.60 163.20 163.20 170.70 171.70 171.80 183.70 1	DL Angle 0.66 1.11 1.07 0.62 0.80 1.20 0.18 0.48 1.02 0.25 0.79 0.94 1.01 0.72 0.75 0.75 0.75 0.75 0.75 0.75 0.75 0.75	Depth 3103 3133 3165 3196 3226 3257 3250 3350 3351 3413 3443 3447 3503	Blackhawk Sh & Sits I minor gas i minor gas i 1.06 1.02 1.15 1.26 1.45 1.30 1.40 1.40 1.30 1.12 1.09 1.16 1.34	3420' 80%; Ss 20%; I increases of up Azimuth 174.90 175.60 174.00 167.30 169.60 165.50 155.00 152.50 154.50 159.00 160.20	28,16 28,66 ate 3110' race Coal DL Angle 0,96 0,14 0,42 0,55 0,66 0,40 0,82 0,31 0,54 0,79 0,33 0,23
MENTORY R SED LAST 24 SED LAST 24 SED LAST 24 SED LAST 24 SED LAST 24 SED LAST 24 SED LAST 24 SED LAST 24 SED LAST 25 SED LAST	Deviation CON	Azimuth 184.79 195.53 186.87 180.49 175.88 164.40 162.92 175.85 143.19 137.30 141.51 185.70 235.75 203.90 1773.03 1773.03	SHOW INTE FROM (N) DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 1.04 0.65 1.29 1.04 0.65 0.65 0.65 0.62 0.40 0.53 0.53 0.62 0.40 0.53 0.53 0.65 0.55 0.65 0.55	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1698 1720 1751 1762 1813 1844 1835 1906 1935 1997 2028 2060 2091 2120 2152 183	Deviation 0.88 0.75 0.73 0.84 0.51 0.85 0.81 1.20 1.00 0.88 0.84 1.120 1.100 1.105 1.118 1.30 1.75 1.76 1.79 1.61 1.81 1.88 1.91 1.88 1.95 1.74 1.99 2.03	Azimuth 190.80 190.50 201.30 218.50 196.70 194.00 157.60 164.00 155.00 165.00 165.00 165.40 164.20 155.20 164.60 165.40 164.60 165.40 1	DEVIAT DL Angle 1.35 0.39 0.47 1.08 1.103 1.29 0.43 1.29 0.43 1.29 0.43 1.29 0.45 1.23 1.06 0.59 0.33 1.08 1.11 1.20 0.30 0.54 1.59 0.30 0.54 1.59 0.30 0.54 1.59 0.30 0.59 0.30 0.50 0.30 0.50 0.30 0.50 0.30 0.50 0.30 0.3	Depth 2244 2275 2306 2337 2367 2397 2429 2460 2492 2523 2553 2554 2614 2644 2672 2703 2734 2764 2826 2856 2857 2919 2951 2981 3013 3042	RVEYS Deviation 2.27 2.24 2.06 1.95 1.49 1.22 0.98 1.22 1.10 1.80 1.80 1.80 1.80 1.80 1.80 1.80	Azimuth 147.80 156.50 155.70 157.60 163.20 170.70 171.90 171.70 60 163.70 165.40 165.40 165.40 165.40 165.40 165.40 165.40 165.40 165.40 165.40 165.40 165.40 165.40 165.40 165.50 168.70	Sample person Sample Description	Depth 3103 3133 3165 3196 3226 3257 3250 3350 3351 3413 3443 3447 3503	Blackhawk Sh & Sits I minor gas i minor gas i 1.06 1.02 1.15 1.26 1.45 1.30 1.40 1.40 1.30 1.12 1.09 1.16 1.34	3420' 80%; Ss 20%; I increases of up Azimuth 174.90 175.60 174.00 167.30 169.60 165.50 155.00 152.50 154.50 159.00 160.20	28,11 28,60 ate 3110' race Coal DL Angle 0.98 0.14 0.42 0.55 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
Depth 538 566 602 633 664 695 633 664 695 757 757 757 757 757 757 757 757 757 7	Deviation CON	Azimuth 184.79 195.53 186.87 180.49 175.88 164.40 162.92 175.85 143.19 137.30 141.51 185.70 235.75 203.90 1773.03 1773.03	SHOW INTE FROM (N) DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 1.04 0.65 1.29 1.04 0.65 0.65 0.65 0.62 0.40 0.53 0.53 0.62 0.40 0.53 0.53 0.65 0.55 0.65 0.55	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1698 1720 1751 1762 1813 1844 1835 1906 1935 1997 2028 2060 2091 2120 2152 183	Deviation 0.88 0.75 0.73 0.84 0.51 0.85 0.81 1.20 1.00 0.88 0.84 1.120 1.100 1.105 1.118 1.30 1.75 1.76 1.79 1.61 1.81 1.88 1.91 1.88 1.95 1.74 1.99 2.03	Azimuth. 190.80 190.50 201.30 215.50 201.30 194.00 187.20 196.70 202.10 179.00 157.60 146.50 155.00 161.00 155.40 164.20 154.10 155.20 146.50 145.10 155.20	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.09 0.43 1.09 0.43 1.09 0.43 1.09 0.43 1.09 0.43 1.09 0.43 1.09 0.65 1.23 0.65 1.23 0.65 1.23 0.65 1.23 0.65 1.23 0.65 1.23 0.65 1.23 0.65 1.23 0.65 0.83 0.50 0.83 0.50 0.83 0.50 0.83 0.50 0.83 0.50 0.83 0.50 0.83 0.50 0.83 0.50 0.83 0.50 0.83 0.50 0.83 0.50 0.83 0.50 0.83 0.50 0.83 0.50 0.83 0.50 0.83 0.50 0.83	Depth 2244 2275 2306 2337 2367 2369 2429 2420 2492 2523 2553 2584 2814 2844 2876 2876 2876 2876 2876 2876 2876 2876	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.95 1.95 1.95 1.10 1.30 1.50 1.66 1.82 1.77 1.30 1.20 0.90 0.90 0.90 0.90 0.90	Azimuth 147.80 156.50 155.70 157.60 163.20 170.70 171.90 171.70 60 163.70 165.40 165.40 165.40 165.40 165.40 165.40 165.40 165.40 165.40 165.40 165.40 165.40 165.40 165.40 165.50 168.70	Sample person Sample Description	Depth 3103 3133 3165 3196 3226 3257 3250 3350 3351 3413 3443 3447 3503	Blackhawk Sh & Sits I minor gas i minor gas i 1.06 1.02 1.15 1.26 1.45 1.30 1.40 1.40 1.30 1.12 1.09 1.16 1.34	3420' 80%; Ss 20%; I increases of up Azimuth 174.90 175.60 174.00 167.30 169.60 165.50 155.00 152.50 154.50 159.00 160.20	28,16 28,66 ate 3110' race Coal DL Angle 0,96 0,14 0,42 0,55 0,66 0,40 0,82 0,31 0,54 0,79 0,33 0,23
Depth 538 566 602 633 664 695 633 664 695 757 757 757 757 757 757 757 757 757 7	Deviation CON	Azimuth 184.79 195.53 186.87 180.49 175.88 164.40 162.92 175.85 143.19 137.30 141.51 185.70 235.75 203.90 1773.03 1773.03	SHOW INTE FROM (N) DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 1.04 0.65 1.29 1.04 0.65 0.65 0.65 0.62 0.40 0.53 0.53 0.62 0.40 0.53 0.53 0.65 0.55 0.65 0.55	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1698 1720 1751 1762 1813 1844 1835 1906 1935 1997 2028 2060 2091 2120 2152 183	Deviation 0.88 0.75 0.73 0.84 0.51 0.85 0.81 1.20 1.00 0.88 0.84 1.120 1.100 1.105 1.118 1.30 1.75 1.76 1.79 1.61 1.81 1.88 1.91 1.88 1.95 1.74 1.99 2.03	Azimuth. 190.80 190.50 201.30 215.50 201.30 194.00 187.20 196.70 202.10 179.00 157.60 146.50 155.00 161.00 155.40 164.20 154.10 155.20 146.50 145.10 155.20	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.09 0.43 1.09 0.43 1.09 0.43 1.09 0.43 1.09 0.43 1.09 0.43 1.09 0.65 1.23 0.65 1.23 0.65 1.23 0.65 1.23 0.65 1.23 0.65 1.23 0.65 1.23 0.65 1.23 0.65 0.83 0.50 0.83 0.50 0.83 0.50 0.83 0.50 0.83 0.50 0.83 0.50 0.83 0.50 0.83 0.50 0.83 0.50 0.83 0.50 0.83 0.50 0.83 0.50 0.83 0.50 0.83 0.50 0.83 0.50 0.83 0.50 0.83	Depth 2244 2275 2306 2337 2367 2369 2429 2420 2492 2523 2553 2584 2814 2844 2876 2876 2876 2876 2876 2876 2876 2876	RVEYS Deviation 2.27 2.24 2.06 1.95 1.49 1.22 0.98 1.22 1.10 1.80 1.80 1.80 1.80 1.80 1.80 1.80	Astmuth 147.80 156.50 158.70 157.60 163.20 170.70 171.90 171.20 171.60 163.20 165.40 1	Sample person Sample Description	Depth 3103 3135 3196 3226 3257 3350 3350 33596	Blackhawk Sh & Sits I minor gas i minor gas i 1.06 1.02 1.15 1.26 1.45 1.30 1.40 1.40 1.30 1.12 1.09 1.16 1.34	3420' 80%; Ss 20%; I increases of up Azimuth 174.90 175.60 174.00 167.30 169.60 165.50 155.00 152.50 154.50 159.00 160.20	28,16 28,66 ate 3110' race Coal DL Angle 0,96 0,14 0,42 0,55 0,66 0,40 0,82 0,31 0,54 0,79 0,33 0,23 1,52
MEMORY R SED LAST 24 NORMS INVESTIGATION OF THE PROPERTY OF TH	CON CON	Asimuth. 194.79 159.50 159.53	SHOWINTE FROM (8) DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 1.43 2.30 0.53 0.33 0.62 1.43 2.30 0.51 0.55 0.52 0.53 0.33 0.62 1.48 2.30 0.30	Depth 1407 1438 1468 1498 1532 1563 1595 1626 1657 1688 1720 1751 1782 1813 1844 1375 1996 1935 1997 2028 2080 2091 2120 2152 2133 2213	Deviation 0.68 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 1.00 1.12 1.05 1.18 1.30 1.75 1.70 1.61 1.91 1.88 1.95 1.74 1.99 2.03 2.42 ASSUMED	Azimuth 190.80 190.50 201.30 218.50 208.70 194.00 187.20 196.70 202.10 196.70 195.70 157.60 164.00 155.00 161.00 161.00 1	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 0.65 1.23 0.65 1.23 1.06 0.83 0.54 1.59 0.83 0.50 0.83 0.54 1.59 0.83 0.50 0.83 0.54 1.59 0.50 0.83 0.50 0.83	Depth 2244 2275 2306 2337 2367 2399 2429 2450 2492 2523 2553 2584 2614 2644 2672 2703 2734 2764 2826 2856 2857 2919 2951 2951 2951 3013 3042 3072	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.95 1.95 1.95 1.95 1.96 1.12 1.30 1.50 1.66 1.82 1.77 1.30 1.20 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0	Armuth 147.80 156.50 155.70 157.60 163.20 170.70 171.10 171.20 170.50 163.70 163.10 175.40 163.70 165.40 163.70 165.40 163.70 165.40 163.70 178.90 184.00 195.10 177.10 178.90 184.00 195.10 177.10 178.90 184.00 195.10 177.10 178.90 184.00 195.10 19	DL Angle 0.86 0.86 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.80 1.20 0.18 0.48 1.02 0.25 0.79 0.94 1.01 0.72 0.72 0.72 0.73 0.86	Depth 3103 3133 3135 3196 3256 3257 3283 3350 3350 3350 3351 3443 3472 3503 3596	Deviation	3420' 80%; Ss 20%; I increases of up Azimuth 174.90 175.60 175.60 175.00 165.50 155.00 159.00 159.00 159.00 159.00 159.00 159.00 159.00 159.00 159.00 159.00 159.00 159.00 159.00 159.00 159.00 159.00 159.00 159.00 159.00	28,16 28,66 ate 3110' race Coal DL Angle 0,96 0,14 0,42 0,55 0,66 0,40 0,52 0,31 0,54 0,79 0,33 0,23 1,52
NVENTORY R SED LAST 22	Deviation CON	Azimuth 184.79 195.53 186.87 180.49 175.88 164.40 162.92 175.85 143.19 137.30 141.51 185.70 235.75 203.90 1773.03 1773.03	SHOW INTE FROM (N) DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 1.88 0.51 0.95 1.04 0.65 0.65 0.65 0.65 0.62 0.40 0.53 0.53 0.53 0.65 0.55 0.65 0.65 0.65 0.55	To (th) Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1688 1720 1751 1782 1813 1844 1875 1906 1935 1967 1997 2028 2060 2091 2120 2152 2183 2213	Deviation 0.88 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 1.00 1.12 1.05 1.18 1.30 1.75 1.76 1.70 1.61 1.91 1.88 1.95 1.74 1.99 2.03 2.42	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 196.70 202.10 202.10 202.10 202.10 179.00 157.50 164.00 149.00 155.00 161.00 155.00 161.00 155.00 161.00 155.00 161.00 155.00 161.00 155.10 161.00 155.10 161.00 155.10 161.00 155.10 161.00	DEVIAT DL Angle 1.35 0.39 0.47 1.08 1.10 0.29 0.43 1.23 1.04 0.43 1.29 0.43 1.20 0.43 1.20 0.43 1.20 0.43 1.21 0.55 0.59 0.53 0.54 1.59 0.59 0.39 1.12 1.05 0.39 1.12 1.05 0.39 1.12 1.05 0.39 1.15 1.52	Depth Land Land Land Land Land Land Land Land	RVEYS Deviation 2.27 2.24 2.08 1.95 1.48 2.05 1.95 1.48 1.22 0.98 0.96 1.23 1.10 1.30 1.60 1.58 1.82 1.77 1.30 1.60 1.58 1.82 1.77 1.30 1.00 0.90 0.90 0.90 0.90 0.90 0.90 0.9	Azimuth 147.80 156.50 155.70 157.60 163.20 170.70 171.90 171.70 171.90 157.40 163.70 168.70 168.70 168.70 169.20 177.10 179.90 184.00 191.00 205.80 205.50 206.00 191.10	DL Angle 0.86 1.11 0.84 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.80 1.20 0.18 0.48 1.02 0.25 0.79 0.94 1.01 0.72 0.78 0.56 1.18 1.03 0.86 0.8	Depth 3103 3133 3196 3226 3257 3288 3320 3350 3350 33596	Deviation 1.06 1.02 1.15 1.26 1.45 1.38 1.12 1.09 1.15 1.20 1.15 1.20 1.15 1.20 1.	3420' 80%; Ss 20%; I increases of u Azimuth 174.90 175.60 174.00 167.30 169.60 155.00 159.00 159.00 159.00 178.80 178.80	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23 1.52
MUD PLANTS NEWENTORY R SED LAST 24 SED LAST 24 SED LAST 24 SED LAST 24 MUD CO REVIOUS CUL AMALATIVE MUC BACK GROUND 10-30 Depth 538 566 602 633 664 695 727 757 737 817 844 376 907 936 9111 1128 1159 1191 1221 1252 1253 1314 1346 1377	Deviation CON	Azimuth 184.79 189.53 186.87 180.49 180.29 175.88 164.40 182.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 128.70 128.70 129.73 130.39 141.51 185.70 235.75 203.90 173.00 180.00	SHOW INTE FROM (N) 0.19 0.76 0.17 0.21 0.88 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.53 0.53 0.53 0.53 0.53 0.53 0.54 0.55 0.65 0.62 0.76	Depth 1407 1438 1448 1498 1532 1563 1595 1626 1557 1638 1720 1751 1762 1813 1844 1375 1996 1935 1997 2028 2000 2091 2120 2152 2183 2213 2213 STROKE LENGTH (n)	Deviation 0.689 0.75 0.73 0.84 0.51 0.83 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.18 1.30 1.75 1.70 1.61 1.91 1.88 1.95 1.74 1.99 2.03 2.42 ASSUMED EFF 1/5)	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 157.20 196.70 157.60 155.00 155.00 155.00 155.00 155.00 155.10 155.20 146.50 155.20 155.20 155.20 155.20 155.20 155.20 155.20 155.20 1	DEVIAT DL Angle (8)	Depth 2244 2275 2306 2337 2367 2399 2429 2460 2492 2523 2553 2584 2614 2644 2672 2703 2734 2734 2734 2734 2734 2734 2734 273	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.45 1.22 0.98 0.98 1.23 1.10 1.50 1.50 1.50 1.50 1.50 1.50 1.50	Arren LENTS Azimuth 147.80 156.50 155.70 157.60 163.20 170.10 171.70 171.90 171.90 171.20 170.60 183.70 183.70 183.70 183.70 183.10 191.10 191.10 205.80 221.40 224.80 205.00 191.10 CIRC Standpips (pri)	DL Angle 0.86 1.11 0.84 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.80 1.20 0.18 0.90 0.18 0.90 0.18 0.90 0.18 0.90 0.18 0.90 0.90 0.18 0.90 0.9	Depth 3103 3135 3196 3226 3253 3320 3351 3413 3442 3503 3596	Deviation 1.08 1.08 1.15 1.26 1.40 1.38 1.12 1.09 1.15 1.26 1.40 1.40 1.40 1.50 2.00 1.60 1.	3420' 80%; Ss 20%; I increases of u increases of u 174.90 175.60 174.00 167.30 169.60 155.50 155.00 159.00 159.00 178.30 178.30	28,16 28,66 ate 3110' race Coal DL Angle 0,96 0,14 0,42 0,53 0,66 0,40 0,82 0,31 0,54 0,79 0,33 0,23 1,52

EVERGREEN OPERATING, INC. DAILY DRILLING REPORT

RIG CONTACT INFORMATION:

OFFICE TRAILER / FAX: 970 942 7543

CONSULTANT HAND CELL: 303 913 1054

DOGHOUSE: 307 258 7315

PUSHER:

DATE SPUD DATE	6AM DEPTH
9/4/20044 8/16/2004	3824
REPORT NO.	24 HR FOOTAGE
19	169
DRLG CONTRACTOR	DAYS SINCE SPUD
Elenburg, Rig 12	19
CONSULTANT	AFE# API#
John C. Lamb	43-007-30718

ACTIVITY AT REPORT TIME:	DAILY COST		CUMICOST		AFE COSTS	
	\$	12,935	\$	620,731	\$	-
Drilling ahead						

Chi	RONOLOG	SY OF DAIL	Y OPERATIONS (06:00 - 06:00 HRS)	SLOW	PUMP RA	TE DATA:		STRING	WEIGHT INFO	RMATION:	
FROM	TO	HOURS		Depth	SPM	Pressure	Eff BHA Wt		Slackoff:	Hoisting:	1,195,1
(hrs)	(hrs)	(hrs)	Activity:	3820	54	450	40,017	105,000	101,000	110,000	satation
06:00	09:30	3.50	Drill 3655 - 3686, continued drag and torque at connection	on - Drag a	nd torque f	ound while me	oving pipe up o	r down when re	otating - much le	ess arag with no	Totation
09:30	10:00	0.50	Short trip into casing - Drag and torque while moving pip			oulling and rot	ating up to 40K	overpull. 6-8K	drag with no ro	tation	
10:00	10:30	0.50	Service rig - tighten pump belts with bit 100' into casing i	no drag or t	orque						
10:30	11:00	0.50	Trip back to bottom found same in open hole - rotate wh	le going do	own - takes	weight - 5 - 1	OK that drills of	f - Run in with	no rotation and	it slips to bottom	1 easily
11:00	12:00	1.00	Drill 3686 - 3696, rough drilling as if running one junk								
12:00	12:30	0.50	Wireline survey 2 1/4 deg at 3686								
12:30	13:15	0.75	Drill 3696 - 3705, rough drilling - able to smooth out with	50 RPM							
13:15	14:00	0.75	Rig repair - change swab in pump							<u> </u>	
14:00	23:30	9.50	Drill 3705 - 3788 drilling smoothed out at 3730' - no more	drag on c	onnections						
23:30	00:00	0.50	Wireline survey 2 1/2 deg at 3748								
00:00	00:15	0.25	Drill 3788 - 3790								-
00:15	01:15	1.00	Rig repair - rod oiler								
01:15	05:15	4.00	Drill 3790 - 3820								
05:15	05:45	0.50	Wireline survey 3 deg at 3810								
05:45	06:00	0.25	Drill 3820 - 3824								
											•
										··	
									RECE	IVED	
									DEC 1	3 2004	
								- DiV	OF OIL C	S & MININ	
						-			o one, or	IC OF INVISION	
TOTAL H	OUDS	24.00									

	DAILY	CUM
DESC.	(hrs)	(hrs)
Drill	19.25	272.00
Trip	1.00	31.75
Circulate		4.50
Rig Repair	1.75	28.25
Rig Service	0.50	5.75
Dev Survey	1.50	1.25
NU / ND		21.00
Cement		2.50
Run Casing		8.00
woc		
OH Logging		
Mix Mud		
MI & RU		6.00
RatHole		
Mouse Hole		
Fishing		
Other		0.50
Coring		
Inspect BHA		
Cut drig line		1.25
Wash & Ream		1.25
Drill Cement		8.25
Test BOPE	L .	3.50
woo		1
PU/LD BHA		4.50
insp circ equip		3.50
TOTALS	24.00	403.75

	SUMMARY OF DAILY & CUMULATIVE C		DAILY	Π	CUM	110.76	AFE	1000
COST CODE	DESCRIPTION OF DAILY COSTS		(\$)		(\$)		(\$)	
2030.010	Land, Legal, Title, Survey, Arch, Damages, Permits, Signs							
2030.031	Dirtwork, Road, Location, Pits, Liner							
2030.019	Contract Drilling 9480 / day 392.5 / h cond 5071 26,000 mob sfc 36791	\$	9,480	\$	245,072			
2032.001	Water			\$	5,592			
2032.013	Drill Bits, Stabilizers, Reamers			\$	42,500			
2031.046	Cementing and Services			\$	26,636			
2030.053	Coring and Analysis							
2030.052	Logging		_					
2030.054	Mud Logging	\$	750	\$	4,500			
2030.037	Rental Equipment	\$	1,905	\$	31,995			
2030.028	Transportation			\$	8,842			
2032.004	Mud and Chemicals			\$	28,661			
	Directional Services, Mud Motors			\$	106,512			
	Intermediate casing			\$	70,415			
2030.035	Contract Labor			\$	5,245			
2030.022	Engineering / Supervision	\$	800	\$	15,200			
2030.099	Intangible Miscellaneous and Contingencies					L		
2040.001	Surface Casing			\$	17,790			
2040.004	Production Casing			<u> </u>				
1011.000	Float Equipment, Shoes, Centralizers	<u> </u>		\$	1,800			
1041.000	Wellhead Equipment			\$	9,971			
1073.000	Bottom Hole Pump / Gas Lift / Other							
1104.000	Drivehead, Engine / Motor and Hydraulic Pump / Electric Unit							
2040.052 / 2040.055	Valves and Fittings, Small / Large			L				
2040.067	Other Surface Equipment							
2040.099	Tangible Miscellaneous and Contingencies							
	TOTAL COSTS	S	12,935	5	620,731	\$		

	19	Date:	09/04/04	mo!	<u> </u>		nsen 1-18	REPO	RT						Page 2
			Well Na	me:		Je		T RECOR	<u> </u>						
BIT	BIT	T	Т	<u> </u>		ОЕРТН	DEPTH	FOOTAGE	CUM BIT		T		ВІТ		IT GRADING
NO.	SIZE		1	SERIAL	JETS	JN -	our	DRILLED	HOURS	ROP	WOB	RPM	TORQUE		Seals Gge Dull Oth
(#)	(in)	MFG	TYPE	NO.	(32/32/32)	(R)	. (40)	(0)	(hrs)	(f/hr)	(Fb)	MTR/TBL	2100 - 2900		LEFE 1/8 CI
1	12 1/4	Security	XL 18N	754840 10408516	18 / 18 / 18 / 18	1,799	1,799 2,698	1,305 899	102.75 83.25	12.7	36 - 43 35 - 40	45 / 60 45 / 45-70	1400 - 2200		
3	12 1/4	Security Smith	XL43 F4	MT6085	18 / 18 / 18	2,698	3,522	824	83.25	9.9	35 - 40	45 / 60	1600 - 2550		EEE1/2 RG TORG
4	7 7/8	Smith	F57YOD	MT2530	12 / 13 / 12	3,522	3,824	302	31.50	9.6	23 - 28	55 - 60	1800 - 2400		
		-						0		#DIV/0!					
								0		#DIV/0!	ļ				
<u> </u>						<u> </u>		0	LL	#DIV/0!	L	1			
	VENTS		mud motor and dire	ectional tools						CASING D	TATA				
RENT	AL EQUIP			100		T	e es de la		EXTERNAL	INTERNAL		T T	TOP	воттом	
ITEM	COSTS	COSTS		SIZE	WEIGHT	GRADE	CONN	DRIFTID	COLLAPSE	YÆLD	CAPACITY	LENGTH	SET AT	SET AT	
	(5)	(5)		1		10.00	100		(psi)	(psl)	(bbls/ft)	(ft)	(ħ)	(R KB)	
wing Qtrs	\$ 315			30°	NA.	NA						40.00	0.00	40.00	
c Tank	\$ 45	\$ 845		13 3/8"	54.5	J55	ST&C	12.459	1,130	2,730	0.15450	500.00	2.00	498.00	
klifg	\$ 60			8 5/8"	32	J55	ST&C	7.796	2,530	3,930	0.06090	3,545.00	0.00	3,520.00	
tajohn	\$ 20					<u> </u>					<u> </u>				
d Travier d Cleaner	\$ 50 \$ 375		<u> </u>		A 17 77	1 1 1 1 1 1 1 1	F 1/2	В	ОНМОТТС	LE ASSE	MBLY	139.47			
R R	\$ 100				7.44.5					MAXIMUM	MINIMUM				
odniler	\$ 90		-					THREA	AD SIZE	O.D.	1.0.	LENGTH	340.00	HRS SINCE	
mud cirr	\$ 600	\$ 975	DES	SCRIPTION OF	ВНА	PROV	ADER	вох	PIN	(ln)	(fn)	(ft)	HOURS RUN	INSPECTION	
collars		\$ 5,585		Bit			nith	4:22	4 1/2 R	7,875 6.250	2.500	2.90	12.25 12.25	12.25	-
ock Sub	\$ 250	\$ 4,500		Bit sub	Sub	Spi	ig idle	4 1/2 R 4 1/2 XH	4 1/2 XH 4 1/2 XH	6.500	6.375	10.03	12.25	12.25	
~		1		6 1/2" Drill C		R		4 1/2 XH	4 1/2 XH	6.500	2.313	525.85	12.25	12.25	
*		1		- 4 1/2 HW			ig	4 1/2 XH	4 1/2 XH	4.500	2.875	61.78	12.25	12.25	ļ
« «	<u> </u>										L				
											 	-			
×		┼						 -							
TOTALS	\$ 1,905	\$ 31,995												<u> </u>	L
					Bitsyr William	. 234		G MUD R		111,75	Take	1 de la 1			
SAMPLE	1,200	MUD	PUNNEL.	1. 7		GEL	FILTRATE		CAKE	50110-	SAND	ρΗ	CHLORIDES	ALKALINITY	LCM
DEPTH (ft)	TIME (thomp)	WT.	VISCOSITY (sec/qt)	PV/YP	KCL (%)	STRENGTH (Ib/100 R2)	API (ml/30 mln)	CALCIUM (ppm)	THICKNESS (/32 in)	50LID5 (% vol)	(% vol)	L	(ppm)	Pf/Mf	lb/gal
3,530	(hh:mm) 18:30	(PPg) 8.30	26	1/0	1.001	0/0	NC	40	NC	0.0	0	7.5	2,800	0 / 4.4	Bicarbs 5368 mg /
0,000	10.00	1									ļ				
		<u> </u>		<u> </u>								<u> </u>			<u> </u>
14(4)						DA	ILY MUD	COST & I	NVENTOR	Υ	,				TOTAL
			BARITE	QUICK GEL	CAUSTIC	LIME	SODA ASH	UNIDRILL	SOLKWICK	PAC-R	PHPA	CEDAR	TRUCKING		costs
			(s×)	(sx)	(s×)	(sx)	(sx)	(sx.)	(sx)	(sx)	(gai)	(sx)	7777377777		
IT COST			120												
ARTING INVI			120									†		XIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	
											L				
SED LAST 24	HOURS											-			
SED LAST 24 NDING INVEN															
NDING INVEN	TORY ST														28,6
ADING INVEN MILY MIUD CO REVIOUS CUA	ITORY IST MULATIVE COS	T.													
NDING INVEN NILY MUD CO REVIOUS CUM	ITORY IST MULATIVE COS	1.					MUD LO	OGGER RE	EPORT.						28,5 28,6
MUDING INVENT AILY MUDICO REVIOUS CLA MULATIVE M	TORY UST MULATIVE COS MUD COST GAS DATA (In	Units)	sноw імте	1		OF PENETRATI	ON	Mail and	SHOW GAS DA			Tons:	Price River	2100' Castled	28,6
NDING INVEN ALLY MUD GO REVIOUS CLA MULATIVE N MUD BACK	TORY UST MULATIVE COS MUD COST GAS DATA (In	Units) TRUP	FROM	70	BEFORE	DURING	ON AFTER	BEFORE		AFTER UNITS	Formation	Tops:	Price River	2100' Castleg 3420'	28,6
ADING INVENT MILY MUD CO REVIOUS CLA MILLATIVE M	TORY UST MULATIVE COS MUD COST GAS DATA (In	Units)		1			ON	Mail and	SHOW GAS DA	AFTER			Blackhawk		28,6 ate 3110'
IDING INVENT LILY MUD CO EVIOUS CUA MULATIVE M MUD BACK GROUND	TORY UST MULATIVE COS MUD COST GAS DATA (In	Units) TRUP GAS	FROM (ft)	70 (ft)	BEFORE (ft)	OUPING (R)	ON AFTER (R)	BEFORE UNITS	SHOW GAS DA' DURING UNITS	AFTER UNITS		centages:	Blackhawk	3420'	28,6 ate 3110'
DING INVEN ILY MUD CO EVIOUS CUA MULATIVE N MUD BACK GROUND	TORY UST MULATIVE COS MUD COST GAS DATA (In	Units) TRUP GAS	FROM (ft)	70 (ft)	BEFORE (ft)	OUPING (R)	ON AFTER (R)	BEFORE UNITS	SHOW GAS DA' DURING UNITS	AFTER UNITS	Sample per	centages:	Blackhawk	3420'	28,6 ate 3110'
DING INVEN ILY MUD CO EVIOUS CUA MULATIVE N MUD BACK GROUND	TORY UST MULATIVE COS MUD COST GAS DATA (In	Units) TRUP GAS	FROM (ft)	70 (ft)	BEFORE (ft)	OUPING (R)	ON AFTER (R) 8	BEFORE UNITS 20	SHOW GAS DA DURING UNITS 175	AFTER UNITS	Sample per	centages:	Blackhawk	3420'	28,6 ate 3110'
DING INVENIONG INVENIONG INVENIONG CUM MULATIVE IN MUD BACK GROUND 10 - 20	TORY IST MULATIVE COS WILD COST GAS DATA (In CONN) GAS	Units) TRUE GAS 125	FROM (n) 3755	70 (%) 3760	86FORE (ft) 7	DURING (R) 1 - 3	ON AFTER (R) 8	BEFORE UNITS 20 ION SUF	SHOW GAS DA DURING UNITS 175 RVEYS	AFTER UNITS 30	Sample per Sample Desc	centages: ription:	Blackhawk 60% Sitst,	3420' 20% Ss, 20% S	28,6 ate 3110' h, tr Coal
DING INVENTIONS CURL LY MUD CO EVIOUS CUR MULATIVE M MUD BACK IROUND 10 - 20	TORY IST MILATIVE COS MILD COST GAS DATA (In CONN GAS DAS DAS DEVIATION	Units) TRUP GAS 125	FROM (ft)	70 (%) 3760	ecrore (6) 7	OURING (R) 1-3 Azimuth	ON AFTER (R) 8 B DEVIAT	BEFORE UNITS 20	DUPING UNITS 175 RVEYS Deviation	AFTER UNITS 30	Sample per	centages:	Blackhawk	3420'	28,0 ate 3110'
DING INVENT LY MUD CO EVIOUS CUA MULATIVE N MUD BACK BROUND	TORY IST MULATIVE COS WILD COST GAS DATA (In CONN) GAS	Units) TRUE GAS 125	FROM (n) 3755	70 (%) 3760	86FORE (ft) 7	DURING (R) 1 - 3	ON AFTER (R) 8	BEFORE UNITS 20 ION SUF	SHOW GAS DA DURING UNITS 175 RVEYS	AFTER UNITS 30 Azimuth	Sample per Sample Desc	centages: ription:	Blackhawk 60% Sitst, 2	3420' 20% Ss, 20% S Azimuth 174.90 175.60	28, ate 3110' h, tr Coal DL Angle 0.96 0.14
DING INVENION CONTROL CONTRO	TORY IST MILATIVE COS MILO COST GAS DATA (In CONN GAS Deviation 1.03	TRUP GAS 125 Azimuth 134.79	PROM (ft) 3755 DL Angle 0.19 0.76 0.17	70 (%) 3760 Depth 1407 1438 1468	Deviation 0.69 0.73	Azimuth 190.80 190.50 201.30	DEVIAT DL Angle 1.35 0.39 0.47	Depth 2244 2275 2306	DURING UNITS 175 RVEYS Deviation 2.27 2.24 2.06	AFTER UNTS 30 30 42 42 42 42 42 42 42 42 42 42 42 42 42	Sample per Sample Desc DL Angle 0.66 1.11 0.64	Depth 3103 3133 3165	Blackhawk 60% Sitst, Deviation 1.06 1.02 1.15	3420' 20% Ss, 20% S Azimuth 174.90 175.60 174.00	28,6 ate 3110' h, tr Coal DL Angle 0.96 0.14 0.42
Depth 538 566 602 633	MULATIVE COST GAS DATA (In CONN GAS DATA (In 10 CONN GAS 10 CONN 10 C	Azimuth 104.79 19.53 186.87 180.91	PLAngle 0.19 0.76 0.17 0.21	70 (%) 3760 Depth 1407 1438 1468	Deviation 0.69 0.75 0.73	Azimuth 190.80 190.50 201.30 218.50	DEVIAT DL Angle 1.35 0.39 0.47 0.83	Depth 2244 2275 2306 2337	DAVIATION 2.27 2.06 2.05	AFTER UNTS 30 30 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	Sample per Sample Desc DL Angle O.66 0.64 0.13	Centages: ription: Depth 3103 3133 3165 3196	Blackhawk 60% Sitst, 2 Deviation 1.06 1.02 1.15 1.26	3420' 20'4 Ss, 20'4 S Azimuth 174.90 175.60 174.00 167.30	28, ate 3110' h, tr Coal DL Angle 0.96 0.14 0.42 0.58
MILIO CO MILIO TIME IN MILIO TIME MILIO TIME IN MILIO TIME IN MILIO TIME IN MILIO TIME IN MILIO TIME IN MILIO TIME IN MILIO TIME IN MILIO TIME IN MILIO TIME IN MILIO TIME IN MILIO TIME IN MILIO TIME IN MILIO TIME MILIO TIME IN MI	MULATIVE COS MILD COST GAS DATA (In CONN GAS Deviation 1.03 1.22 1.20 1.25 1.34	Azimuth 144.79 189.53 186.67 180.91 180.49	PROM (8) 3755 DL Angle 0.19 0.76 0.17 0.21 0.68	Depth 1407 1438 1468 1499 1532	Deviation 0.69 0.75 0.73 0.84 0.51	Azimuth 190.80 190.50 201.30 218.50 208.70	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08	DEFORE UNITS 20 LON SUP Depth 2244 2275 2306 2337 2367	CVEYS Daviation 2.27 2.24 2.06 2.05 1.95	Arter UNTS 30 Azimuth 147.80 156.50 158.70 157.60 163.20	DL Angle 0.66 1.11 0.64 0.13 0.73	Centages: ription: Depth 3103 3165 3196 3226	Deviation 1.06 1.15 1.26 1.45	3420' 20% Ss, 20% S Aximuth 174.90 175.60 174.00 167.30 169.60	28, ate 3110' h, tr Coal DLAngle 0.96 0.14 0.42 0.58 0.66
MUD CO EVIOUS CLA MULATIVE N MUD BACK ROUND 10 - 20 Dapth 538 566 602 633 664 695	MULATIVE COS MULATIVE COS MULATIVE COS MULATIVE COS MULATIVE COS CONN GAS Deviation 1.03 1.22 1.20 1.25 1.34	Azimuth 144.79 189.53 126.91 180.49 180.29	PROM (N) 3755 DL Angle 0,19 0,76 0,17 0,21 0,68 0,26	Depth 1407 1438 1489 1532 1563	Deviation 0.89 0.75 0.73 0.84 0.51	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.108	BEFORE UNITS 20 LON SUF 2244 2275 2306 2337 2367 2399	SHOW GAS DAY DURING UNITS 175 175 Deviation 2.27 2.24 2.06 2.05 1.95 1.48	Azimuth 147.80 158.50 157.60 163.20 170.70	DL Angle 0.66 1.11 0.64 0.73	Depth 3103 3133 3165 3226 3257	Deviation 1.06 1.02 1.15 1.26 1.38	3420' 20% Ss, 20% S Azimuth 174.90 175.60 174.00 167.30 169.60 165.50	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40
MILD Depth 538 664 695 727	MALATIVE COS MALA	Azimuth 184.79 198.53 126.97 180.29 175.88	DL Angle 0,19 0,75 0,17 0,21 0,63 0,26 0,36	Depth 1407 1435 1468 1499 1532 1563	Deviation 0.89 0.75 0.73 0.84 0.51 0.83 0.65	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29	BEFORE UNTS 20 ION SUF 2244 2275 2306 2337 2367 2399 2429	RVEYS Deviation 2.27 2.24 2.06 2.05 1.45 1.22	Asimuth 147.80 156.50 157.60 163.70 170.70	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87	Centages: ription: Depth 3103 3165 3196 3226	Deviation 1.06 1.15 1.26 1.45	3420' 20% Ss, 20% S Aximuth 174.90 175.60 174.00 167.30 169.60	28, ate 3110' h, tr Coal DLAngle 0.96 0.14 0.42 0.58 0.66
MILO CO MILO C	Deviation 1.03 1.22 1.20 1.34 1.28 1.32 1.34 1.	Azimuth 184.79 199.53 186.57 188.91 180.49 190.29 175.88 164.40	PROM (ft) 3755 DL Angle 0.76 0.17 0.21 0.65 0.28 0.38 0.89	Depth 1407 1438 1488 1499 1532 1563 1595 1626	Deviation 0.89 0.75 0.73 0.84 0.51 0.85 0.81	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 196.70	DEVIAT DL Angle 1 35 0.39 0.47 0.83 1.08 1.13 0.29 0.43	BEFORE UNITS 20 LON SUF 2244 2275 2306 2337 2367 2399	SHOW GAS DAY DURING UNITS 175 175 Deviation 2.27 2.24 2.06 2.05 1.95 1.48	Azimuth 147.80 158.50 157.60 163.20 170.70	DL Angle 0.66 1.11 0.64 0.73	Depth 3103 3185 3196 3226 3257 3288	Blackhawk 60% Sitst, 3 Deviation 1.06 1.02 1.15 1.26 1.45 1.33 1.40	3420' 20% Ss, 20% S Azimuth 174.90 175.60 167.30 169.60 155.50	28, ate 3110' h, tr Coal DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82
MUD CO EVIOUS CLA MULATIVE M BACK BROUND 10 - 20 Dapth 538 560 664 695 727	MALATIVE COS MALA	Azimuth 184.79 198.53 126.97 180.29 175.88	DL Angle 0.19 0.76 0.17 0.21 0.62 0.36 0.39 0.12 0.63	Depth 1407 1435 1468 1499 1532 1563	Deviation 0.89 0.75 0.73 0.84 0.51 0.83 0.65	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29	DEFORE UNTS 20 20 20 20 20 20 20 20 20 20 20 20 20	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.86	Azimuth 147.80 156.50 157.70 170.70 170.10 171.70 171.90 171.20	Sample per Sample Desc	Centages: ription: Depth 3103 3133 3165 3196 3226 3257 3283 3320 3350 3381	Blackhawk 60% Sitst, 	3420' 20% Ss, 20% S Azimuth 174.90 175.80 174.00 167.30 169.50 155.00 159.00 152.50 154.50	28, ate 3110' h, tr Coal DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79
MUD CO MU	Deviation 1.03 1.22 1.20 1.34 1.33 1.48 1.43 1.43 1.43 1.43 1.45 1.	Azimuth 134.79 199.53 186.87 180.49 190.29 175.88 164.40 162.92 143.19	PROM (ft) 3755 DL Angle 0.76 0.17 0.21 0.65 0.26 0.36 0.39 0.12 0.68	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1683 1720	Deviation 0.89 0.75 0.73 0.84 0.51 0.85 0.85 0.81	Azimuth 190.80 190.50 201.30 216.50 206.70 194.00 187.20 196.70 202.10 202.10 179.00	DEVIAT DL Angle 1.35 0.39 0.47 0.63 1.08 1.13 0.29 0.43 1.29 0.65 1.23	Depth 2244 2275 2306 2337 2367 2429 2460 2492 2523 2553	RVEYS Deviation 2.27 2.24 2.06 2.06 1.95 1.48 0.96 0.96 0.99 1.23	Azimuth 147.80 156.50 156.70 163.20 170.70 171.70 171.90 171.60	DL Angle O.66 1.11 O.64 O.13 O.73 O.87 O.84 O.01 O.17 O.1	Depth 3103 3103 3196 3226 3257 3283 3320 3351 3413	Blackhawk 60% Sits(,) Deviation 1.06 1.02 1.15 1.28 1.45 1.33 1.40 1.36 1.12 1.15	3420' 20% Ss, 20% S Astmuth 174.90 175.60 169.60 165.50 155.00 159.00 159.00 159.00 159.00 159.00	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33
INC INVENTION OF THE PROPERTY	MILLATIVE COS MILLATIVE CO	Azimuth 144.79 150.49 150.49 164.40 162.92 155.52 143.19 137.08	DL Angle 0.19 0.76 0.17 0.21 0.36 0.28 0.38 0.38 0.12 0.68 1.29 1.88	Depth 1407 1438 1468 1498 1592 1563 1595 1686 1657 1638 1751	Deviation 0.69 0.75 0.73 0.84 0.85 0.85 0.81 1.20 1.00 0.88 0.88	Azimuth 190.80 201.30 210.50 201.30 210.50 200.70 194.00 187.20 196.70 202.10 202.10 207.00 177.00	DEVIAT DL Angle 1 35 0.39 0.47 0.83 1.13 0.29 0.43 1.29 0.65 1.23 1.04	Depth 2244 2275 2306 2337 2367 2399 2429 2460 2492 2553 2554	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.49 1.22 0.98 0.98 0.91 1.23 1.10	Azimuth 147.80 156.50 156.70 170.10 171.90 171.20 170.80 163.20 170.80 163.20 170.70	Sample per Sample Desc	Centages: ription: Depth 3103 3133 3165 3196 3226 3227 3230 3350 3381 3413 3443	Blackhawk 60% Sitst, Deviation 1.06 1.02 1.15 1.26 1.45 1.33 1.40 1.40 1.36 1.12 1.01 1.02	3420' 20% Ss, 20% S Azimuth 174.90 175.80 174.00 167.30 169.80 155.00 159.00 159.00 159.00 159.00 169.00 169.00	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.31 0.54 0.79 0.33 0.23
NAC INVENTION OF THE PROPERTY	MILLATIVE COS MILLATIVE CO	Azimuth 184.79 199.53 126.87 188.91 180.49 190.29 175.88 164.40 162.92 156.32 143.19 137.08 130.59	DL Angle 0,19 0,76 0,17 0,21 0,68 0,28 0,18 0,19 0,76 0,17 0,17 0,17 0,17 0,17 0,17 0,17 0,17	Depth 1408 1499 1595 1626 1688 1720 1751 1782	Deviation 0,69 0,75 0,73 0,84 0,85 0,81 1,20 1,00 0,88 0,84 0,93	Azimuth 190.50 201.30 218.50 201.30 218.50 202.10 196.70 202.10 177.20 196.70 202.10 179.00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 0.43	Depth 2244 2275 2306 2337 2367 2449 2450 2452 2553 2554 2614	RVEYS Devlation 2.27 2.24 2.06 2.05 1.95 1.22 0.98 0.98 0.91 1.23 1.10 1.30	Azimuth 147.80 156.50 157.60 167.70 170.10 171.90 171.90 171.90 163.70 163.70 163.70	Sample per Sample Desc	Depth 3103 3135 3196 3226 3257 3288 3320 3351 3413 3443 3472	Blackhawk 60% Sitst, Deviation 1.08 1.02 1.15 1.26 1.45 1.33 1.40 1.40 1.109 1.116 1.34	3420' 20% Ss, 20% S Astmuth 174.90 175.60 169.60 165.50 155.00 159.00 159.00 159.00 159.00 159.00	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33
Depth 558 669 669 677 757 787 787 844 876 9907 9936	Deviation 1.03 1.22 1.24 1.34 1.33 1.44 1.43 0.84 0.86 0.	Azimuth 124.79 189.53 186.87 180.49 177.88 164.40 162.92 143.19 137.08 130.59 112.85	PROM (#) 3755 DL Angle 0.76 0.17 0.21 0.65 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51	Depth 1407 1438 1488 1499 1532 1563 1563 1626 1657 1626 1751 1772 1751 1781	Deviation 0.89 0.75 0.73 0.84 0.51 0.85 0.81 1.20 0.03 0.84 1.12	Azimuth 190.80 190.50 201.30 216.50 206.70 194.00 187.20 196.70 202.10 202.10 179.00 157.60 164.00 149.00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.43 1.29 0.43 1.04 0.43 1.05	Depth 2244 2275 2306 2337 2367 2399 2429 2460 2492 2523 2553 2584 2844 2844	RVEYS Deviation 2.27 2.24 2.06 1.95 1.40 0.96 0.96 0.96 1.23 1.10 1.23 1.10 1.30 1.60	Azimuth 147.80 156.50 156.50 157.60 163.20 170.10 171.70 171.90 171.00 163.70	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.84 0.01 0.17 1.07 0.62 0.80 1.20 0.80 1.20	Centages: ription: Depth 3103 3103 3133 3165 3196 3226 3220 3350 3351 3413 3413 3443 3472 3503	Blackhawk 60% Sitst, 1 1.06 1.02 1.15 1.26 1.45 1.33 1.40 1.40 1.36 1.12 1.09 1.18	3420' 20% Ss, 20% S Azimuth 174.90 175.80 174.00 167.30 169.80 155.00 159.00 159.00 159.00 159.00 169.00 169.00	DLAngle 0.96 0.14 0.42 0.58 0.66 0.40 0.02 0.31 0.54 0.79 0.33 0.23
Depth 538 602 639 727 757 757 757 759 936 9971	MILLATIVE COS MILLATIVE CO	Azimuth 184.79 185.53 186.67 188.91 180.49 180.29 175.88 164.40 162.92 156.82 143.19 143.05 130.59 112.85	DL Angle 0,19 0,76 0,17 0,21 0,68 0,28 0,18 0,19 0,76 0,17 0,17 0,17 0,17 0,17 0,17 0,17 0,17	Depth 1408 1499 1595 1626 1688 1720 1751 1782	Deviation 0,69 0,75 0,73 0,84 0,85 0,81 1,20 1,00 0,88 0,84 0,93	Azimuth 190.50 201.30 218.50 201.30 218.50 202.10 196.70 202.10 177.20 196.70 202.10 179.00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 0.43	Depth 2244 2275 2306 2337 2367 2449 2450 2452 2553 2554 2614	RVEYS Devlation 2.27 2.24 2.06 2.05 1.95 1.22 0.98 0.98 0.91 1.23 1.10 1.30	Azimuth 147.80 156.50 157.60 167.70 170.10 171.90 171.90 171.90 163.70 163.70 163.70	Sample per Sample Desc	Depth 3103 3135 3196 3226 3257 3288 3320 3351 3413 3443 3472	Blackhawk 60% Sitst, Deviation 1.08 1.02 1.15 1.26 1.45 1.33 1.40 1.40 1.109 1.116 1.34	3420' 20% Ss, 20% S Azimuth 174.90 175.80 174.00 167.30 169.80 155.00 159.00 159.00 159.00 159.00 169.00 169.00	DLAngle 0.96 0.14 0.42 0.58 0.66 0.40 0.02 0.31 0.54 0.79 0.33 0.23
Depth 538 662 633 664 664 677 757 787 787 787 787 787 787 787 787 7	Deviation 1.03 1.22 1.24 1.34 1.33 1.44 1.43 0.84 0.86 0.	Azimuth 124.79 189.53 186.87 180.49 177.88 164.40 162.92 143.19 137.08 130.59 112.85	DL Angle 0.19 0.76 0.17 0.21 0.68 0.36 0.49 0.12 0.68 1.29 1.88 0.51	Depth 1407 1437 1468 1498 1532 1563 1595 1685 1685 1720 1751 1782 1782	Deviation (6) 7 Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05	Azimuth 190.80 190.50 201.30 218.50 296.70 194.00 187.70 202.10 196.70 202.10 179.00 157.60 184.00 149.00 155.00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 0.43 1.04 0.43	Defore UNTS 20 LON SUF Depth 2244 2275 2306 2337 2367 2399 2499 2492 2523 2584 2614 2644 2672	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.98 0.98 0.91 1.23 1.10 1.30 1.58	Azimuth 147.80 156.50 156.70 170.10 171.70 171.70 171.70 171.70 175.40 163.70 157.40 163.70	Sample per Sample Desc.	Centages: ription: Depth 3103 3133 3165 3196 3226 3257 3283 3350 3351 3443 3472 3503 3596 3596	Blackhawk 60% Sitst, Deviation 1.06 1.02 1.15 1.26 1.45 1.40 1.40 1.40 1.40 1.40 1.40 1.40 1.40	3420' 20% Ss, 20% S Azimuth 174.90 175.80 174.00 167.30 169.80 155.00 159.00 159.00 159.00 159.00 169.00 169.00	28,6 ate 3110' h, tr Coal DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
Dapth 538 566 602 633 664 695 727 757 817 844 876 996 9971 1034	Deviation 1.03 1.22 1.20 1.34 1.48 1.43 1.44 1.45 1.	Azimuth 144.79 150.29 175.88 16.49 160.29 175.88 164.40 162.92 156.82 143.19 130.59 112.85 107.94 109.50 120.10	DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.38 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65	Depth 1407 1435 1468 1499 1532 1563 1595 1626 1657 1683 1720 1751 1772 1775 1772 1813 1814 1875	Deviation 0.83 0.84 0.51 1.20 1.00 0.83 0.85 0.81 1.20 1.00 0.83 0.84 0.51 1.20 1.00 0.83 0.84 0.93 1.12 1.05 1.18 1.30 1.75	(t) 1 - 3 Azimuth 190.80 190.50 201.30 215.50 218.70 194.00 187.70 202.10 202.10 196.70 202.10 196.70 196.70 196.70 196.70 196.70 196.70 196.70 196.70	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 0.43 1.04 0.59 0.83 0.54	Depth 2244 2275 2306 2337 2367 2399 2490 2490 2553 2554 2614 2672 2703 2734 2764	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.44 1.22 1.22 1.23 1.10 1.30 1.58 1.68 1.68 1.62 1.77	Azimuth 147.80 156.50 158.70 157.60 163.20 170.70 171.90 171.20 170.60 163.70 157.40 165.40 163.70 165.40 163.70	Sample per Sample Desc.	Depth 3103 3103 3105 3196 3226 3257 3285 3320 3381 3443 3447 3503 3596 3686	Blackhawk 60% Sitst, Deviation 1.08 1.02 1.15 1.26 1.45 1.33 1.40 1.40 1.109 1.16 1.34 1.50 2.00 2.25	3420' 20% Ss, 20% S Azimuth 174.90 175.80 174.00 167.30 169.80 155.00 159.00 159.00 159.00 159.00 169.00 169.00	28,6 ate 3110' h, tr Coal DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
Dapth 538 566 602 633 664 695 727 757 7814 847 8907 936 971 1034 1096 1097 1128	Deviation 1.03 1.22 1.25 1.34 1.43 1.43 1.44 1.43 1.44 1.07 1.00 1.16 1.	Azimuth 184.79 189.53 126.87 188.91 180.49 180.29 175.88 164.40 162.92 156.82 143.19 130.59 112.85 107.94 109.50 120.10 128.70 132.57	PROM (N) 3755 DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.68 1.29 0.51 0.95 1.04 0.65 0.62 0.62 0.62 0.62 0.62 0.62 0.62 0.62	Depth 1407 1438 1468 1499 1595 1626 1657 1653 17782 1813 1844 1875 1906 1906 1967	Deviation 0.89 0.75 0.73 0.84 0.85 0.81 1.20 1.00 0.88 0.93 1.12 1.12 1.105 1.18 1.30 1.75	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 196.70 202.10 179.00 164.00 148.50 155.00 148.50 152.00 165.00 161.00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 0.43 1.06 0.59 0.33 0.54	Depth 2244 2276 2396 2492 2452 2553 2554 2614 2644 2674 2773 2734 2734 2266	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.49 1.22 0.98 0.99 0.91 1.23 1.10 1.30 1.60 1.65 1.66 1.82 1.77	Azimuth 147.80 156.80 158.70 157.60 163.20 170.70 171.90 171.20 170.80 165.40 165.40 165.40 165.40 165.40 165.10 177.10	Sample per Sample Desc	Centages: ription: Depth 3103 3103 3103 3196 3226 3257 3283 3320 3350 3381 3413 3443 3472 3503 3596 3596 3748	Blackhawk 60% Sitst, 1 Deviation 1.06 1.02 1.15 1.26 1.45 1.38 1.40 1.40 1.19 1.19 1.19 1.19 2.20 2.20 2.25 2.50	3420' 20% Ss, 20% S Azimuth 174.90 175.80 174.00 167.30 169.80 155.00 159.00 159.00 159.00 159.00 169.00 169.00	28,6 ate 3110' h, tr Coal DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
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Dapth 538 566 602 633 664 695 727 757 787 844 876 997 936 9971 1034 1066 1066 1128 1159 1191 1221	Deviation 1.03 1.22 1.25 1.34 1.43 1.43 1.44 0.71 0.36 0.50 0.91 1.00 1.16 1.19 1.01 0.76	Azimuth 184.79 189.53 126.49 180.49 180.49 180.29 175.88 184.40 182.92 156.82 143.19 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51	PROM (N) 3755 DL Angle 0.19 0.76 0.17 0.21 0.88 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51 0.95 0.05 0.05 0.05 0.05 0.05 0.05 0.05	Depth 1407 1438 1468 1499 1552 1563 1750 1751 1762 1813 1844 1875 1906 1935 1967 1997 2028 2060	Deviation 0.68 0.77 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.84 0.93 1.12 1.05 1.18 1.30 1.75 1.76 1.70 1.61 1.91	Azimuth 190.30 190.50 201.30 211.50 201.30 215.50 202.10 192.20 196.70	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 0.43 1.06 0.43 1.06 0.43 1.06 0.43 1.07 0.83 1.08 1.09 0.83 1.09 0.83 1.09 0.83 1.09 0.83 1.09 0.83 1.09 0.83 1.09 0.83 1.09 0.83 1.09 0.83 1.09 0.83 1.09 0.83 0.99 0.83 0.99 0.83 0.99 0.83 0.99 0.99 0.99 0.99 0.99 0.99 0.99 0.9	Depth 2244 2276 2396 2337 2367 2399 2429 2450 2492 2523 2553 2564 2614 2644 2674 2773 27734 2734 2734 2734 2734 2734 2	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.45 1.22 0.98 0.99 1.10 1.30 1.60 1.66 1.82 1.77 1.30 1.20 0.90	Azimuth 147.80 156.50 158.70 170.10 171.90 171.20 170.40 163.70 165.40 1	Sample per Sample Desc	Centages: ription: Depth 3103 3103 3103 3196 3226 3257 3283 3320 3350 3381 3413 3443 3472 3503 3596 3596 3748	Blackhawk 60% Sitst, 1 Deviation 1.06 1.02 1.15 1.26 1.45 1.38 1.40 1.40 1.19 1.19 1.19 1.19 2.20 2.20 2.25 2.50	3420' 20% Ss, 20% S Azimuth 174.90 175.80 174.00 167.30 169.80 155.00 159.00 159.00 159.00 159.00 169.00 169.00	28,6 ate 3110' h, tr Coal DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
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Depth 538 566 602 633 664 692 757 757 787 781 1066 1097 11128 11129 11129 11129 11221 1223 1233 144 1346	Deviation 1.03 1.22 1.25 1.34 1.34 1.34 1.34 1.34 1.34 1.35 1.48 1.43 0.84 0.71 0.96 0.91 1.00 1.	Azimuth 184.79 188.91 180.49 177.88 166.87 188.91 180.49 175.88 164.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 128.70 132.57 137.30 141.51 165.70 235.75 203.90 172.10	PROM (#) 3755 DL Angle 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51 1.04 0.65 0.62 0.40 0.53 0.33 0.62 1.48 2.30 0.51 0.55	TO (8) 3760 3760 3760 1407 1407 1438 1468 1499 1532 1563 1595 1626 1657 1638 1720 1751 1762 1813 1844 1875 1906 1935 1997 2028 2060 2091 2120 2152	Deviation (6) 7 7 Deviation 0.89 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.85 0.84 1.12 1.105 1.115 1.30 1.75 1.70 1.61 1.91 1.85 1.95 1.74 1.99 2.03	1-3 1-3 1-90.80 190.80 190.50 201.30 216.50 206.70 194.00 196.70 202.11 202.10 179.00 157.60 184.00 149.00 155.00 149.00 155.00 149.00 155.00 156.00 166.00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.23 1.06 0.59 0.54 1.59 0.83 0.54 1.59 0.83 0.54 0.59 0.83 0.54 0.59 0.83 0.54 0.59 0.83 0.54 0.59 0.83 0.54 0.59 0.83 0.54 0.59 0.39 0.102	Depth 2244 2275 2307 2367 2392 2460 2492 2523 2553 2564 2614 2644 2672 2703 2734 2764 2826 2856 2857 2919 2951 2981 33042	RVEYS D=Vlation 2.27 2.24 2.08 2.05 1.95 1.22 0.96 1.23 1.10 1.50 1.50 1.51 1.20 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0	Azimuth 147.80 156.50 158.70 157.60 163.20 170.10 171.70 171.90 171.20 170.60 163.70 163.70 163.70 163.70 163.70 163.70 163.70 163.10 177.10 1	DL Angle O.68 O.68 O.69 O.73 O.73 O.62 O.87 O.84 O.01 O.17 O.62 O.89 O.94 O.95 O.9	Centages: ription: Depth 3103 3103 3103 3196 3226 3257 3283 3320 3350 3381 3413 3443 3472 3503 3596 3596 3748	Blackhawk 60% Sitst, 1 Deviation 1.06 1.02 1.15 1.26 1.45 1.38 1.40 1.40 1.36 1.12 1.09 1.16 1.34 1.50 2.00 2.25	3420' 20% Ss, 20% S Azimuth 174.90 175.80 174.00 167.30 169.80 155.00 159.00 159.00 159.00 159.00 169.00 169.00	DLAngle 0.96 0.14 0.42 0.58 0.66 0.40 0.02 0.31 0.54 0.79 0.33 0.23
MUD CATVE M M MUD CATVE M M MUD CATVE M M MUD CATVE M M M MUD CATVE M M M M M M M M M M M M M M M M M M M	Deviation 1.03 1.22 1.25 1.34 1.43 1.44 1.43 1.44 1.43 1.44 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.19 1.01 0.76 0.27 0.30 0.35 0.	Azimuth 184.79 189.53 126.49 180.49 180.49 180.29 175.88 164.40 162.92 156.82 143.19 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75 203.90 173.03	PROM (N) 3755 DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.68 0.12 0.68 0.51 0.51 0.51 0.65 0.62 0.40 0.53 0.33 0.62 1.48 0.23 0.51 0.55 0.62 0.51 0.55 0.62 0.62 0.62 0.63 0.63 0.63 0.63 0.63 0.63 0.63 0.63	Depth 1407 1438 1468 1499 1592 1563 1595 1683 1770 17751 17782 1813 1844 1875 1906 1935 1997 1997 2028 2080 2091 2152	Deviation 0.89 0.75 0.75 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.18 1.30 1.75 1.70 1.61 1.91	(b) 1 - 3 Azimuth 190.80 190.50 201.30 216.50 201.30 216.50 202.10 197.00 197.00 197.00 197.00 196.70 196.	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 0.43 1.06 0.55 1.23 1.06 0.43 1.06 0.43 1.07 0.83 0.85 1.09 0.85 1.29 0.85 1.29 0.85 1.29 0.85 1.29 0.85 1.29 0.85 1.29 0.85 1.29 0.85 1.29 0.85 1.29 0.85 1.29 0.85 1.29 0.85 1.29 0.85 1.29 0.85 1.29 0.85 1.29 0.85 1.29 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85	Depth 2244 2276 2306 2337 2367 2399 2429 2452 2523 2553 2564 2614 2644 2672 2703 2734 2764 2826 2856 2857 2919 2951 2981 3013	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.45 1.22 0.98 0.99 1.10 1.30 1.60 1.65 1.65 1.62 1.77 1.30 1.20 0.90 0.90 0.90 0.90	Azimuth 147.80 156.50 158.70 157.60 163.20 170.70 171.90 171.20 171.20 175.40 165.40 1	Sample per Sample Desc	Centages: ription: Depth 3103 3103 3103 3196 3226 3257 3283 3320 3350 3381 3413 3443 3472 3503 3596 3596 3748	Blackhawk 60% Sitst, 1 Deviation 1.06 1.02 1.15 1.26 1.45 1.38 1.40 1.40 1.36 1.12 1.09 1.16 1.34 1.50 2.00 2.25	3420' 20% Ss, 20% S Azimuth 174.90 175.80 174.00 167.30 169.80 155.00 159.00 159.00 159.00 159.00 169.00 169.00	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
MUD CATVE M M MUD CATVE M M MUD CATVE M M MUD CATVE M M M MUD CATVE M M M M M M M M M M M M M M M M M M M	Deviation 1.03 1.22 1.25 1.34 1.34 1.34 1.34 1.34 1.34 1.35 1.48 1.43 0.84 0.71 0.96 0.91 1.00 1.	Azimuth 184.79 188.91 180.49 177.88 166.87 188.91 180.49 175.88 164.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 128.70 132.57 137.30 141.51 165.70 235.75 203.90 172.10	PROM (#) 3755 DL Angle 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51 1.04 0.65 0.62 0.40 0.53 0.33 0.62 1.48 2.30 0.51 0.55	TO (8) 3760 3760 3760 1407 1407 1438 1468 1499 1532 1563 1595 1626 1657 1638 1720 1751 1762 1813 1844 1875 1906 1935 1997 2028 2060 2091 2120 2152	Deviation (6) 7 7 Deviation 0.89 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.85 0.84 1.12 1.105 1.115 1.30 1.75 1.70 1.61 1.91 1.85 1.95 1.74 1.99 2.03	1-3 1-3 1-90.80 190.80 190.50 201.30 216.50 206.70 194.00 196.70 202.11 202.10 179.00 157.60 184.00 149.00 155.00 149.00 155.00 149.00 155.00 156.00 166.00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.23 1.06 0.59 0.54 1.59 0.83 0.54 1.59 0.83 0.54 0.59 0.83 0.54 0.59 0.83 0.54 0.59 0.83 0.54 0.59 0.83 0.54 0.59 0.83 0.54 0.59 0.39 0.102	Depth 2244 2275 2307 2367 2392 2460 2492 2523 2553 2564 2614 2644 2672 2703 2734 2764 2826 2856 2857 2919 2951 2981 33042	RVEYS D=Vlation 2.27 2.24 2.08 2.05 1.95 1.22 0.96 1.23 1.10 1.50 1.50 1.51 1.20 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0	Azimuth 147.80 156.50 158.70 157.60 163.20 170.10 171.70 171.90 171.20 170.60 163.70 163.70 163.70 163.70 163.70 163.70 163.70 163.10 177.10 1	DL Angle O.68 O.68 O.69 O.73 O.73 O.62 O.87 O.84 O.01 O.17 O.62 O.89 O.94 O.95 O.9	Centages: ription: Depth 3103 3103 3103 3196 3226 3257 3283 3320 3350 3381 3413 3443 3472 3503 3596 3596 3748	Blackhawk 60% Sitst, 1 Deviation 1.06 1.02 1.15 1.26 1.45 1.38 1.40 1.40 1.36 1.12 1.09 1.16 1.34 1.50 2.00 2.25	3420' 20% Ss, 20% S Azimuth 174.90 175.80 174.00 167.30 169.80 155.00 159.00 159.00 159.00 159.00 169.00 169.00	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.31 0.54 0.79 0.33 0.23
MAC DE PUBLICATIVE IN MILES OF THE PUBLICATIVE IN MILES OF	Deviation 1.03 1.22 1.25 1.34 1.34 1.34 1.34 1.34 1.34 1.35 1.48 1.43 0.84 0.71 0.96 0.91 1.00 1.	Azimuth 184.79 188.91 180.49 177.88 166.87 188.91 180.49 175.88 164.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 128.70 132.57 137.30 141.51 165.70 235.75 203.90 172.10	PROM (#) 3755 DL Angle 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51 1.04 0.65 0.62 0.40 0.53 0.33 0.62 1.48 2.30 0.51 0.55	TO (8) 3760 3760 3760 1407 1407 1438 1468 1499 1532 1563 1595 1626 1657 1638 1720 1751 1762 1813 1844 1875 1906 1935 1997 2028 2060 2091 2120 2152	Deviation (6) 7 7 Deviation 0.89 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.85 0.84 1.12 1.105 1.115 1.30 1.75 1.70 1.61 1.91 1.85 1.95 1.74 1.99 2.03	(t) 1 - 3 Azimuth 190.80 190.50 201.30 215.50 201.30 216.50 206.70 194.00 187.20 202.10 202.10 196.70 202.10 157.60 164.00 155.00 165.00 161.00 155.40 164.20 154.10 155.20 145.10 145.10 145.10	DEVIAT DLAngle 1.35 0.39 0.47 0.83 1.03 1.13 0.29 0.43 1.29 0.65 1.23 1.04 0.43 1.06 0.50 0.83 0.54 1.59 0.50 0.39 1.12 1.05 0.26 1.03	Depth 2244 2275 2306 2337 2367 2399 2429 2460 2492 2523 2553 2564 2614 2644 2672 2703 2734 2764 2826 2856 2857 2919 2951 2981 3013 3042 3072	RVEYS D=Vlation 2.27 2.24 2.08 2.05 1.95 1.22 0.96 1.23 1.10 1.50 1.50 1.51 1.20 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0	Azimuth 147.80 156.50 158.70 157.60 163.20 170.10 171.70 171.90 171.20 170.60 163.70 163.70 163.70 163.70 163.70 163.70 163.70 163.10 177.10 1	DL Angle O.68 O.68 O.69 O.73 O.73 O.62 O.87 O.84 O.01 O.17 O.62 O.89 O.94 O.95 O.9	Centages: ription: Depth 3103 3103 3103 3196 3226 3257 3283 3320 3350 3381 3413 3443 3472 3503 3596 3596 3748	Blackhawk 60% Sitst, 1 Deviation 1.06 1.02 1.15 1.26 1.45 1.38 1.40 1.40 1.36 1.12 1.09 1.16 1.34 1.50 2.00 2.25	3420' 20% Ss, 20% S Azimuth 174.90 175.80 174.00 167.30 169.80 155.00 159.00 159.00 159.00 159.00 169.00 169.00	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.31 0.54 0.79 0.33 0.23
Depth 538 con 10 - 20 Con 10 c	Deviation 1.03 1.22 1.25 1.34 1.34 1.34 1.34 1.34 1.34 1.35 1.48 1.43 0.84 0.71 0.96 0.91 1.00 1.	Azimuth 184.79 188.91 180.49 177.88 166.87 188.91 180.49 175.88 164.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 128.70 132.57 137.30 141.51 165.70 235.75 203.90 172.10	PROM (#) 3755 DL Angle 0.19 0.76 0.17 0.21 0.65 0.28 0.39 0.12 0.68 1.29 1.88 0.51 0.95 0.65 0.65 0.65 0.65 0.65 0.65 0.65 0.6	TO (8) 3760 Depth 1407 1438 1468 1499 1532 1563 1595 1626 1857 1638 1720 1751 1782 1813 1844 1875 1906 1935 1967 2028 2060 2060 2091 2120 2152 2183 2213	Deviation 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	Azimuth. 190.80 190.50 201.30 216.50 206.70 194.00 187.20 196.70 202.10 202.10 179.00 155.00 146.50 156.00 156.00 155.00 155.00 155.00 155.00 155.00 155.00 155.00 155.00 155.00 155.00 155.00 155.00 155.00 155.00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.23 1.06 0.59 0.65 1.23 1.06 0.59 0.83 1.06 0.59 0.83 1.06 0.59 0.83 0.54 1.59 0.83 0.54 1.59 0.83 0.54 1.59 0.83 0.54 1.59 0.83 0.54 1.59 0.83 0.54 1.59 0.83 0.54 1.59 0.83 0.54 1.59 0.83 0.54 1.55 0.39 1.12 1.05 0.39 1.12 1.05 0.39 1.15 0.36 0.39 1.15 0.36 0.31 0.36 0.31 0.36 0.31 0.36	DEFORE UNITS 20 LON SUF Depth 2244 2275 2306 2337 2367 2397 2429 2460 2492 2460 2492 2523 2553 2554 2614 2644 2672 2703 2734 2764 2826 2856 2887 2919 2951 2981 3013 3042 3072 RCULATI	RVEYS Deviation 2.27 2.24 2.08 1.95 1.95 1.48 1.22 0.99 1.90 1.60 1.58 1.82 1.77 1.30 1.80 1.82 1.77 1.30 1.80 1.80 1.80 1.80 1.81 1.82 1.77 1.90 1.90 1.90 1.90 1.90 1.90 1.90 1.90	Azimuth 147.80 156.50 158.70 177.10 177.90 168.10 177.10 177.90 184.00 195.40 185.20 170.10 1	DL Angle O.68 1.11 O.64 O.17 O.62 O.87 O.84 O.01 O.17 O.62 O.89 O.94 O.19 O.94 O.95 O.9	Centages: r/pbion: Depth 3103 3103 3103 3105 3106 3226 3226 3220 3350 3381 3413 3472 3503 3596 3748 3310 3596 3748 3756	Blackhawk 60% Sltst, Deviation 1.06 1.02 1.15 1.26 1.45 1.33 1.40 1.40 1.36 1.12 1.09 1.16 1.34 1.50 2.00 2.25 2.50 3.00	3420' 20% Ss, 20% S Azimuth 174.90 175.60 174.00 167.30 169.60 155.00 159.00 159.00 159.00 178.80 160.20 178.80	28, ate 3110' h, tr Coal DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23 1.52
MAC INVENTION OF THE PROPERTY	Deviation 1.03 1.22 1.20 1.25 1.34 1.43 1.43 1.43 1.44 1.45 1.00 1.	Azimuth 184.79 189.53 125 186.87 188.91 180.49 180.29 175.88 164.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75 203.90 173.03	PROM (#) 3755 DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.38 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.62 1.44 2.30 0.51 0.55 0.28 0.30	TO (R) T	Deviation 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	(t) 1 - 3 Azimuth 190.80 190.50 201.30 218.50 208.70 194.00 187.70 202.10 202.10 196.70 202.10 157.60 164.00 158.00 165.00 165.00 165.00 165.00 165.00 165.00 165.00 165.00 165.00 165.00 165.00 165.00 165.00 165.00	DEVIAT DLAngle 1.35 0.39 0.47 0.83 1.03 1.13 0.29 0.43 1.29 0.65 1.23 1.04 0.43 1.05 0.83 1.05 0.83 1.05 0.83 1.05 0.83 1.05 0.83 1.05 0.83 1.05 0.83 0.54 0.13 1.52 0.50 0.39 1.12 1.05 0.26 0.31 0.50 0.39 0.50 0.30 0.50 0.30 0.50 0.30 0.50 0.30 0.50 0.30 0.50 0.30 0.50 0.30 0.50 0.30 0.50 0.5	Depth 2244 2275 2306 2337 2367 2399 2429 2460 2492 2523 2553 2564 2614 2644 2672 2703 2734 2764 2826 2856 2857 2919 2951 2981 3013 3042 3072 28CULATI PLMP PLMP PLMP PLMP PLMP PLMP PLMP PLM	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.45 1.22 0.96 0.91 1.30 1.50 1.66 1.62 1.77 1.30 1.50 1.66 1.62 1.77 1.30 1.00 1.00 1.00 1.00 1.00 1.00 1.00	Azimuth 147.80 156.50 158.70 157.00 170.70 171.70 171.20 170.60 163.70 157.40 163.70 163.10 177.10 178.90 184.00 199.10 199.10 199.10 199.10 199.10 199.10 199.10 199.10 199.10 199.10 199.10 199.10 199.10 199.10 199.10 199.10	DL Angle Desc.	Depth 3103 3133 3135 3196 3226 3257 3283 3350 3350 3350 3350 3550 3550 3550 35	Blackhawk 60% Sitst, Deviation 1.06 1.02 1.15 1.26 1.45 1.33 1.40 1.40 1.12 1.09 1.16 1.34 1.50 1.12 1.09 2.25 2.50 3.00	3420' 20% Ss, 20% S Azimuth 174.90 175.80 174.00 187.30 189.80 155.50 155.00 159.00 159.00 159.80 154.50 158.80 160.20 178.80	28,6 ate 3110' h, tr Coal DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23 1.52
Depth 538 566 602 633 664 692 757 757 787 781 1066 1097 11128 11129 11129 11129 11221 1223 1233 144 1346	Deviation 1.03 1.22 1.25 1.34 1.34 1.34 1.34 1.34 1.34 1.35 1.48 1.43 0.84 0.71 0.96 0.91 1.00 1.	Azimuth 184.79 188.91 180.49 177.88 166.87 188.91 180.49 175.88 164.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 128.70 132.57 137.30 141.51 165.70 235.75 203.90 172.10	PROM (#) 3755 DL Angle 0.19 0.76 0.17 0.21 0.65 0.28 0.39 0.12 0.68 1.29 1.88 0.51 0.95 0.65 0.65 0.65 0.65 0.65 0.65 0.65 0.6	TO (8) 3760 Depth 1407 1438 1468 1499 1532 1563 1595 1626 1857 1638 1720 1751 1782 1813 1844 1875 1906 1935 1967 2028 2060 2060 2091 2120 2152 2183 2213	Deviation 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	Azimuth. 190.80 190.50 201.30 216.50 206.70 194.00 187.20 196.70 202.10 202.10 179.00 155.00 146.50 156.00 156.00 155.00 155.00 155.00 155.00 155.00 155.00 155.00 155.00 155.00 155.00 155.00 155.00 155.00 155.00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.23 1.06 0.59 0.65 1.23 1.06 0.59 0.83 1.06 0.59 0.83 1.06 0.59 0.83 0.54 1.59 0.83 0.54 1.59 0.83 0.54 1.59 0.83 0.54 1.59 0.83 0.54 1.59 0.83 0.54 1.59 0.83 0.54 1.59 0.83 0.54 1.59 0.83 0.54 1.55 0.39 1.12 1.06 0.39 1.12 1.05 0.39 1.12 1.05 0.39 1.15 0.36 0.31 1.55	DEFORE UNITS 20 LON SUF Depth 2244 2275 2306 2337 2367 2397 2429 2460 2492 2460 2492 2523 2553 2554 2614 2644 2672 2703 2734 2764 2826 2856 2887 2919 2951 2981 3013 3042 3072 RCULATI	RVEYS Deviation 2.27 2.24 2.08 1.95 1.95 1.48 1.22 0.99 1.90 1.60 1.58 1.82 1.77 1.30 1.80 1.82 1.77 1.30 1.80 1.80 1.80 1.80 1.81 1.82 1.77 1.90 1.90 1.90 1.90 1.90 1.90 1.90 1.90	Azimuth 147.80 156.50 158.70 177.10 177.90 168.10 177.10 177.90 184.00 195.40 185.20 170.10 1	DL Angle O.68 1.11 O.64 O.17 O.62 O.87 O.84 O.01 O.17 O.62 O.89 O.94 O.19 O.94 O.95 O.9	Centages: r/pbion: Depth 3103 3103 3103 3105 3106 3226 3226 3220 3350 3381 3413 3472 3503 3596 3748 3310 3596 3748 3756	Blackhawk 60% Sltst, Deviation 1.06 1.02 1.15 1.26 1.45 1.33 1.40 1.40 1.36 1.12 1.09 1.16 1.34 1.50 2.00 2.25 2.50 3.00	3420' 20% Ss, 20% S Azimuth 174.90 175.60 174.00 167.30 169.60 155.00 159.00 159.00 159.00 178.80 160.20 178.80	28,6 ate 3110' h, tr Coal DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23 1.52
Depth 538 566 602 633 664 692 727 757 787 817 844 847 8907 11128 1159 1159 1159 1159 1159 1159 1159 115	MAKE MAKE	Azimuth 184.79 198.53 125 126 127 188.91 180.49 190.29 175.88 164.40 162.92 156.32 143.19 127.08 130.59 112.85 107.94 109.50 120.10 128.70 132.57 137.30 141.51 165.70 235.75 203.90 172.10 163.30	PROM (#) 3755 DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.68 1.29 1.86 0.51 0.95 1.04 0.65 0.65 0.62 0.40 0.51 0.53 0.33 0.62 1.44 0.53 0.35 0.51 0.55 0.62 0.75 0.75 0.75 0.75 0.75 0.75 0.75 0.75	TO (8) 3760 Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1858 1720 1751 1762 1813 1844 1875 1906 1935 1997 2028 2060 2091 2120 2120 2120 21213	Deviation (6) 7 Deviation 0.89 0.75 0.73 0.84 0.51 0.83 0.84 0.51 1.20 1.00 0.88 0.84 1.12 1.05 1.18 1.30 1.75 1.76 1.81 1.30 1.75 1.81 1.91 1.88 1.95 1.74 1.99 2.03 2.42 ASSLMED EFF ('c')	Azimuth. 190.80 190.50 190.50 201.30 218.50 206.70 194.00 197.20 196.70 202.10 179.00 157.60 149.00 155.00 149.00 155.00 164.00 155.00 164.00 155.00 164.00 155.00 165.00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.23 1.04 1.23 1.06 0.59 0.50 1.23 1.04 1.05 0.50 1.23 1.04 1.05 0.50 1.23 1.04 1.05 0.50 0.39 1.12 1.06 0.59 0.39 1.12 1.07 0.88 0.13 1.55 0.26 0.39 1.15 0.26 0.39 1.15 0.26 0.39 1.15 0.26 0.39 1.15 0.26 0.39 1.15 0.26 0.39 1.15 0.26 0.39 1.15 0.26 0.39 1.15 0.26 0.39 1.15 0.26 0.39 1.15 0.26 0.39 1.15 0.26 0.39 0.39 0.39 0.39 0.39 0.39 0.39 0.39	Depth 2244 2275 2307 2397 2429 2450 2523 2553 2584 2614 2674 2773 2734	RVEYS D=vlation 2.27 2.24 2.06 2.05 1.95 1.49 1.22 0.96 0.99 1.23 1.10 1.30 1.50 1.58 1.66 1.62 1.77 1.30 1.50 1.50 1.50 1.70 1.70 1.70 1.70 1.70 1.70 1.70 1.7	Azimuth 147.80 156.50 158.70 157.60 163.20 170.10 171.70 171.90 171.20 170.80 163.70 163.70 165.40 165.40 165.40 165.40 165.40 165.40 165.40 165.40 177.10 179.90 184.00 196.10 191.10 191.10 205.80 205.00 191.10	Sample per Sample Desc	Depth 3103 3103 3103 3103 3103 3103 3105 3105 3106 3207 3288 3320 3350 3350 3350 3351 3443 34472 3503 3598 3686 3748 3510	Blackhawk 60% Sitst, Deviation 1.08 1.02 1.15 1.26 1.45 1.33 1.40 1.40 1.40 1.36 1.12 1.09 1.16 1.34 1.50 2.00 2.05 2.50 3.00	3420' 20% Ss, 20% S Azimuth 174.90 175.80 174.00 167.30 169.80 155.00 155.00 159.00 159.00 174.00 175.80 176.80 177.80 177.80 180.80 1	28,6 ate 3110' h, tr Coal DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23 1.52

WELL NAME		
Jensen 1-18 43-0	07-30	718
LOCATION DATA		
NW NW Sec 16 T-12S	R-10E	
FOOTAGES -	GL	кв
SEN ENI SENI FWI	7569	7580

EV_AGREEN OPERATING, INC. DAILY DRILLING REPORT

RIG CONTACT INFORMATION:						
942 7543						
913 1054						
258 7315						
7						

DATE SPUD DATE	SAM DEPTH
9/5/20044 8/16/2004	3824
REPORT NO.	24 HR FOOTAGE
20	182
DRLG CONTRACTOR	DAYS SINCE SPUD
Elenburg, Rig 12	20
CONSULTANT	AFE# API#
John C. Lamb	43-007-30718

ACTIVITY AT REPORT TIME:	DAILY COST	·	CUM COST		AFE COSTS	
Drilling ahead	\$	18,807	\$	639,538	\$	-
29						

CH	RONOLOG	GY OF DAIL	Y OPERATIONS (06:00 - 06:00 HRS)	SLOW	PUMP RA	TE DATA:		STRING	S WEIGHT INFO	RMATION:
FROM	то	HOURS		Depth	SPM	Pressure	Eff BHA Wt		Slackoff:	Hoisting:
(hrs)	(hrs)	(hrs)	Activity:	3820	54	450	40,017	105,000	101,000	110,000
06:00	14:15	8.25	Drill 3824 - 3895 Note: rough drilling and yesterday's o	irag and tor	que sympt	oms reappear	ed after connec	tion at 3872'		
14:15	15:00	0.75	Rig repair - liner gasket							
15:00	15:15	0.25	Drill 3895 - 3898							
15:15	15:30	0.25	Rig repair - liner gasket							
15:30	15:45	0.25	Drill 3898 - 3899							<u>.</u>
15:45	17:00	1.25	Rig repair - liner gasket							**
17:00	18:45	1.75	Drill 3899 - 3912, drilling more smoothly without drag an	d torque sy	mptoms					
18:45	19:15	0.50	Wireline survey 3 deg at 3902							
19:15	06:00	10.75	Drill 3912 - 4006							
		<u> </u>								
		<u></u>								
			Gas Increases:							
			3829 - 3836 4 - 2 - 6 60 - 420 - 30							
			3918 - 3923 8 - 1 - 8 20 - 1670 - 30							
			3945 - 3549 5 - 2 - 7 30 - 260 - 20							
			3954 - 3960 6 - 2 - 9 30 - 400 - 30							
			3968 - 3971 8 - 3 - 7 30 - 300 - 40		_				7	have a
			3999 - 4001 5 - 1 - 6 20 - 410 - 20						TI-C	FIVEn-
									DEC-1	EIVED
						•			DEC 1	3 2004
			-					(2		
								· · · · · · · · · · · · · · · · · · ·	У ОР О П. С	AS & MINING
	IOURS	24.00								MILANAC

SUMMARY	OF RIG HO	URS
	DAILY	CUM
DESC.	(hrs)	(hrs)
Drill	21.25	272.00
Trip		31.75
Circulate		4.50
Rig Repair	2.25	30.50
Rig Service		5.75
Dev Survey	0.50	1.75
NU / ND		21.00
Cement		2.50
Run Casing		8.00
woc		
OH Logging		
Mix Mud		
MI & RU		6.00
RatHole		
Mouse Hole		
Fishing		
Other		0.50
Coring		
inspect BHA		
Cut drig line		1.25
Wash & Ream		1.25
Drill Cement		8.25
TestBOPE		3.50
w00		
PU/LD BHA		4.50
inspicinc equip		3.50
TOTALS	24.00	406.50

		DAILY			CUM	AFE
COST CODE	DESCRIPTION OF DAILY COSTS		(\$)		(\$)	(\$)
2030.010	Land, Legal, Title, Survey, Arch, Damages, Permits, Signs			<u> </u>		
2030.031	Dirtwork, Road, Location, Pits, Liner					
2030.019	Contract Drilling 9480 / day 392.5 / h cond 5071 26,000 mob sfc 36791	\$	9,480	\$	254,552	
2032.001	Water			\$	5,592	
2032.013	Drill Bits, Stabilizers, Reamers			\$	42,500	
2031.046	Cementing and Services			\$	26,636	
2030.053	Coring and Analysis			<u> </u>		
2030.052	Logging					
2030.054	Mud Logging	\$	750	\$	5,250	
2030.037	Rental Equipment	\$	1,305	\$	33,300	
2030.028	Transportation	\$	5,056	\$	13,898	
2032.004	Mud and Chemicals			\$	28,661	
	Directional Services, Mud Motors			\$	106,512	
	Intermediate casing			\$	70,415	
2030.035	Contract Labor	\$	1,416	\$	6,661	
2030.022	Engineering / Supervision	\$	800	\$	16,000	
2030.099	Intangible Miscellaneous and Contingencies			<u> </u>		
2040.001	Surface Casing			\$	17,790	
2040.004	Production Casing					
1011.000	Float Equipment, Shoes, Centralizers			\$	1,800	
1041,000	Wellhead Equipment	\perp		\$	9,971	
1073.000	Bottom Hole Pump / Gas Lift / Other					
1104.000	Drivehead, Engine / Motor and Hydraulic Pump / Electric Unit					
2040.052 / 2040.055	Valves and Fittings, Small / Large					
040.067	Other Surface Equipment		•			
2040.099	Tangible Miscellaneous and Contingencies					
	TOTAL COSTS	\$	18,807	s	639,538	\$

Report #	20	Date:	09/05/04 Well Na	me.	<u>D</u>		RILLING ensen 1-18		RT	ļ					Page 2
			TVGII INA		-			RECOR	D						Transfer Art.
віт	BIT			T		DEPTH	DEPTH	FOOTAGE	CUM BIT	1.0			BIT		BIT GRADING
NO.	SIZE	Talaka (SERIAL	JETS	IN	our	DRILLED	HOURS	ROP	WOR	RPM MTR/TBL	TORQUE (ft. 1be)	le Out Dull Le	c Seals Gge Dull O
(#)	(In) 12 1/4	Security	TYPE XL 18N	754840	(32/32/32) 14 / 14 / 14 / 1	(A) 6 494	1,799	(ft) 1,305	(hrs) 102.75	(f/hr). 12.7	36 - 43	45 / 60	2100 - 2900		LL EFE 1/8 CI
2	12 1/4	Security	XL43	10408516	18 / 18 / 18	1,799	2,698	899	83.25	10.8	35 - 40	45 / 45-70	1400 - 2200	1	L FEF 1/8 BT ROP
3	12 1/4 7 7/8	Smith Smith	F4 F57YOD	MT6085 MT2530	18 / 18 / 18	2,698 3,522	3,522 4,006	824 484	83.25 52.75	9.9	35 - 40 23 - 28	45 / 60 55 - 60	1600 - 2550 1800 - 2400		L EEE1/2 RG TOR
4	1 1/10	Singi	737100	W112330	127 137 12	5,522	4,000	0	02.70	#DIV/0!					
	T							0		#DIV/0!					
CON	MENTS	Rits 1 2&3 wit	h mud molor and dire	ectional tools			<u> </u>	0		#DIV/0!	1	I	<u> </u>	l	
			1	1						CASING	NATA:	52 3-7		7	
RENTAL	TAL EQUIP	CUM	1			1			EXTERNAL	INTERNAL	T	ř.	TOP	воттом	1
ITEM	COSTS	COSTS	i	SIZE	WEIGHT	GRADE	CONIN	DRIFT ID	COLLAPSE	YIELD	CAPACITY	LENGTH	SET AT	SET AT	
	(\$)	(5)	1			F	193		(psl)	(psi)	(bbls/ft)	(ft) 40.00	(k)	(N KB)	
iwing Qtrs ac Tank	\$ 315 \$ 45		1	30° 13 3/8°	NA 54.5	J55	ST&C	12.459	1,130	2,730	0.15450	500.00	2.00	498.00	
erk left	\$ 60	\$ 930	1	8 5/8"	32	J55	ST&C	7.796	2,530	3,930	0.06090	3,545.00	0.00	3,520.00	
xtajohn	\$ 20 \$ 50		ļ							Į.	1	L	1		
nd Trailer ud Gleaner	\$ 375	\$ 8,500				1 1 1 1 1 1 1 1		В	оттомно	LE ASSE	MBLY	1.440.740	100	1. 200 12.1	Tanti es perco
ж	\$ 100	\$ 2,000		141.74				11.91		MAXIMUM	MINIMUM				
todniler	\$ 90	\$ 1,610 \$ 975	<u></u> -	CHIDTIO	CHA		VIDER .	THREA BOX	ID SIZE PIN	0.D. (in)	I.D. (In)	LENGTH (ft)	HOURS RUN	HRS SINCE INSPECTION	1768 333
mud cinr If ceilars		\$ 5,585	j E	Bit			nith	301	4 1/2 R	7.875	U13)	1.00	31.50	31.50	
ock Sub	\$ 250	\$ 4,750	l	Bit sub		F	tig	4 1/2 R	4 1/2 XH	6.250	2,500	2.90	31.50	31.50	
ner ner	 	_		iffith Shock 6 1/2" Drill C			idle lig	4 1/2 XH 4 1/2 XH	4 1/2 XH 4 1/2 XH	6.500 6.500	6.375 2.313	10.03 525.85	31.50 31.50	31.50 31.50	+
Jak.		<u> </u>		- 4 1/2" HW			tig	4 1/2 XH	4 1/2 XH	4.500	2.875	61.78	31.50	31.50	
ď											ļ	ļ <u> </u>			
ner ner	 										-	-			+
er er			l 🗀 🗀												
TOTALS	\$ 1,305	\$ 33,300				L					L				
				911.00			DRILLIN	3 MUD RI					Market 1		
SAMPLE DEPTH	TIME	MUD WT.	FUNNEL VISCOSITY	PV / VP	KCL	GEL STRENGTH	FR TRATE	CALCIUM	CAKE THICKNESS	50UDS	SAND	ρΗ	CHLORIDES	ALKALINITY	LCM
(#)	(hh:mm)	(PPS)	(sec/qt)		(%)	(Ib/100 R2)	(mi/30 min)	(ppm)	(/32 in)	(% vol)	(% vol)		(ppm)	Pf/Mf	lb/gal
3,530	18:30	8.30	26	1/0		0/0	NC	40	NC	0.0	0	7.5	2,800	0/4.4	Bicarbs 5368 mg /
				1							<u> </u>				-
				11.000		DΔ	ILY MUD (OSTRU	VENTOR	٧			80. H 1 14	500504 Sept.	
199.7								,00,0,	,, c.v.e.v						TOTAL
			BARITE (sx)	QUICK GEL	CAUSTIC (*x)	LIME (sx)	SODA ASH	UNIDRILL (sx)	SOLKWICK (ex)	PAC-R (sx)	PHPA (gall)	CEDAR (sx)	TRUCKING (\$)		COSTS (\$)
IT COST															
ARTING IN			120												
MENTORY R							 								
NDING INVE				-											
	110/(1														
AILY MUD CO	ost														20.0
EVIOUS CU	OST MULATIVE COS	T .													28,6 28,6
EVIOUS CU	OST MULATIVE COS	T	50.000000000000000000000000000000000000				MUDIO	GGER RE	PORT		a. 2011 S	gren in Leagn.			
EVIOUS CU	OST MULATIVE COS	Units)	SHOW INTER	VAL:	RATE	of Penetrati		GGER RE	PORT HOW GAS DA	TA STATE OF THE ST					28,6
MULATIVE MULATIVE MUL BACK	MULATIVE COS MUD COST	Units) TRIP	FROM	70	BEFORE	DURING	AFTER	BEFORE	HOW GAS DA DURING	AFTER	Formation T			2100' Castleg	28,6
REVIOUS CU MULATIVE MUE	MULATIVE COS MUD COST	Units)					ON	, ,	HOW GAS DA				Blackhawk		28,6 ate 3110'
EVIOUS CU MULATIVE MUE BACK	MULATIVE COS MUD COST	Units) TRIP	FROM	70	BEFORE	DURING	AFTER	BEFORE	HOW GAS DA DURING	AFTER		centages:	Blackhawk	3420'	28,6 ate 3110'
EVIOUS CU MULATIVE MUL MUL BACK	MULATIVE COS MUD COST	Units) TRIP	FROM (ft)	70	BEFORE	DURING	AFTER	BEFORE	HOW GAS DA DURING	AFTER	Sample per	centages:	Blackhawk	3420'	28,6 ate 3110'
EVIOUS CU MULATIVE MUE BACK	MULATIVE COS MUD COST	Units) TRIP	FROM (ft)	70	BEFORE	DURING	AFTER	BEFORE	HOW GAS DA DURING	AFTER	Sample per	centages:	Blackhawk	3420'	28,6 ate 3110'
EVIOUS CU MULATIVE MUE BACK	MULATIVE COS MUD COST	Units) TRIP	FROM (ft)	70	BEFORE	DURING	AFTER	BEFORE UNITS	HOW GAS DA DURING UNITS	AFTER	Sample per	centages:	Blackhawk	3420'	28,6 ate 3110'
EVIOUS CLI MULATIVE MULE BACK BROUND	DEST MULATIVE COS MUD COST DEST CONN GAS Deviation	TRIP GAS Azimuth	FROM (ft) see first page	TO (N)	BEFORE (ft) Deviation	DURINS (R)	AFTER (II) DEVIATI	S BEFORE UNITS ON SUR	DURING UNITS VEYS Deviation	AFTER UNITS Azimuth	Sample perc Sample Descr	centages: iption:	Blackhawk 60% Sitst, 4	3420' 10% Ss, tr - 5% Azimuth	25,6 ate 3110' 6 Coal DL Angle
MULATIVE MULATIVE BACK ROUND Depth 538	Deviation Deviation 1.03	Azimuth	FROM (R) see first page DL Angle 0.19	Depth 1407	BEFORE (1) Deviation 0.69	Azimuth 190.80	DEVIATI	Depth 2244	DEVIATION 2.27	AFTER UNITS Azimuth 147.80	Sample percisample Descri	Depth 3103	Blackhawk 60% Sitst, 4 Deviation 1.06	3420' 10% Ss, tr - 5% Azimuth: 174.90	28,4 ate 3110' 4 Coal DL Angle 0.96
MULATIVE MULE MULE MULE BACK BROUND	DEST MULATIVE COS MUD COST DEST CONN GAS Deviation	TRIP GAS Azimuth	FROM (ft) see first page	TO (N)	BEFORE (ft) Deviation	DURINS (R)	AFTER (II) DEVIATI	S BEFORE UNITS ON SUR	DURING UNITS VEYS Deviation	AFTER UNITS Azimuth	Sample perc Sample Descr	centages: iption:	Blackhawk 60% Sitst, 4 Deviation 1.06 1.02	3420' 10% Ss, tr - 5% Azimuth	28,4 ate 3110' 4 Coal
MULATIVE MULATIVE BACK BROUND Depth 538 586 602 633	DEVIATION 1.03 1.22 1.25	Azimuth 184.79 189.53 186.87 186.91	PROM (N) see first page DL Angle 0.19 0.76 0.17 0.21	Depth 1407 1438 1468 1499	Deviation 0.69 0.75	Azimuth 190.50 201.30 218.50	DEVIATION 1.35 0.39	ON SUR Depth 2244 2275	DUPING UNITS VEYS Deviation 2.27 2.24	AFTER UNETS Azimuth 147.80 156.50	Sample percisample Describer DL Angle 0.68 1.11	Depth 3103 3133	Blackhawk 60% Sitst, 4 Deviation 1.06	3420' 10% Ss, tr - 5% Asimuth 174.90 175.60	28,4 ate 3110' 4 Coal DL Angle 0.96 0.14
MULATIVE MULATIVE BACK ROUND Depth 538 586 580 684	Deviation 1.22 1.20 1.34	Azimuth 184.79 189.53 166.67 180.49	DL Angle 0.19 0.76 0.17 0.21 0.68	Depth 1407 1438 1468 1499 1532	Deviation 0.69 0.75 0.73 0.84	Azimuth 190,80 190,50 201,30 218,50 206,70	DEVIATION 1.35 0.39 0.47 0.83 1.08	Depth 2244 2275 2306 2337 2367	DEVISED DEVISE	AFTER UNITS Azimuth 147.80 156.50 158.70 157.60 163.20	DL Angle 0.66 1.11 0.64 0.73	Depth 3103 3165 3196 3226	Blackhawk 60% Sitst, 4 Deviation 1.06 1.02 1.15 1.26 1.45	3420' 10'% Ss, tr - 5'/ Azimuth 174.90 175.60 167.30 169.60	28,4 ate 3110' 4 Coal DL Angle 0.96 0.14 0.42 0.53 0.66
MULATIVE MULATIVE BACK BROUND Depth 538 566 602 6633 664 695	Deviation 1.03 1.22 1.20 1.25 1.34 1.26	Azimuth 184.79 189.53 166.67 180.49 180.29	PROM (N) see first page DL Angle 0.19 0.76 0.17 0.21	Depth 1407 1438 1468 1499 1532 1583	Deviation 0.69 0.75 0.73 0.84 0.51	Azimuth 190.80 190.50 201.30 206.70 194.00	DEVIATI DL Angle 1.35 0.39 0.47 0.83 1.08 1.13	Depth 2244 2275 2306 2337 2367 2399	DIFFING UNITS VEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48	Azimuth 147.80 156.50 157.60 163.20 170.70	DL Angle 0.66 1.11 0.64 0.13 0.73	Depth 3103 3165 3196 3226 3257	Blackhawk 60% Sitst, 4 Deviation 1.06 1.02 1.15 1.26 1.45 1.38	3420' 10' Ss, tr - 5'/ Azimuth 174.90 175.60 174.00 167.30 169.60 165.50	28,4 ate 3110' 4 Coal DL Angle 0.96 0.14 0.42 0.58 0.66 0.40
Depth 538 664 695 727 757	Deviation 1.22 1.26 1.32 1.34 1.28 1.32 1.34	Asimuth 184.79 189.53 186.87 180.49 180.29 175.88 184.40	DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89	Depth 1407 1438 1468 1499 1532 1563 1595 1626	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 197.20 198.70	DEVIATE DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43	ON SUR Depth 2244 2275 2306 2337 2367 2399 2449 2450	DEFINE UNITS VEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.96	Azimuth 147.80 156.50 157.60 163.20 170.70 170.10	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87	Depth 3103 3133 3165 3196 3226 3257 3288 3320	Blackhawk 60% Sitst, 4 Deviation 1.06 1.02 1.15 1.26 1.45	3420' 10'% Ss, tr - 5'/ Azimuth 174.90 175.60 167.30 169.60	28,4 ate 3110' 4 Coal DL Angle 0.96 0.14 0.42 0.53 0.66 0.40 0.82 0.31
Depth 538 566 602 633 664 695 727 787	Deviation 1.03 1.22 1.28 1.32 1.33 1.33	Asimuth 184.79 189.53 106.67 185.91 180.49 180.29 175.88 164.29 162.92	PROM (8) See first page DL Angle 0.19 0.76 0.17 0.21 0.36 0.36 0.36 0.36 0.38 0.12	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 198.70 202.10	DEVIATI DLAngle 1.35 0.47 0.83 1.13 0.29 0.43 1.29	Depth 2244 2275 2306 2337 2367 2399 2429 2450 2492	Deviation 2.27 2.24 2.06 2.05 1.48 1.22 0.96 0.96 0.96	Astmuth 147.80 156.50 157.70 163.20 170.70 171.10 171.90	Sample Descr Sample Descr DL Angle 0.88 1.11 0.64 0.13 0.73 1.62 0.87 0.34 0.01	Depth 3103 3133 3165 3226 3257 3283 3320 3350	Blackhawk 60% Sitst, c 0% Sitst, c 1.06 1.02 1.15 1.45 1.33 1.40 1.40	3420° 1074 Ss., tr - 576 Azimuth 174.90 175.60 174.00 167.30 169.60 155.00 155.00 152.50	28, ate 3110' 4 Coal DL Angle 0.96 0.14 0.42 0.53 0.66 0.40 0.82 0.31 0.54
Depth 538 556 602 633 6695 727 757 787 817	Deviation 1.03 1.22 1.25 1.34 1.33 1.44	Asimuth 184.79 189.53 186.87 180.49 180.29 175.88 184.40	DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89	Depth 1407 1438 1468 1499 1532 1595 1626 1657 1638	Deviation 0.69 0.75 0.84 0.51 0.83 0.85 0.81 1.20 1.00	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 198.70 202.10	DEVIATION (%) DEVIATION (%) 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65	Depth 2244 2275 2306 2337 2367 2429 2429 2492 2523	Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.96 0.96 0.91	Azimuth 147.80 156.50 156.50 170.70 177.10 171.70 171.20	DL Angle 0.86 1.11 0.73 0.73 1.62 0.87 0.84 0.01 0.77	Depth 3103 3133 3165 3196 3226 3257 3288 3320 3350 3381	Daviation 1.06 1.02 1.15 1.26 1.40 1.40 1.38 1.12 1.15 1.28 1.15 1.	3420' 10'4 Ss, tr - 5'4 Azimuth 174.90 175.60 174.00 167.30 169.60 155.50 155.00 159.00 154.50	28,4 ate 3110' 4 Coal DL Angle 0.96 0.14 0.42 0.53 0.66 0.40 0.82 0.31 0.54 0.79
MULATIVE BACK BACK BROWND Depth 538 586 602 603 664 695 727 757 787 817 817 817 8144 876	Deviation 1.02 1.22 1.20 1.25 1.34 1.33 1.44 1.43 0.84	Azimuth 184.79 189.53 166.87 185.91 180.49 180.29 175.88 162.92 155.82 143.19 137.08	DL Angle 0.19 0.76 0.17 0.26 0.36 0.36 0.36 0.48 0.12 0.68 1.29 1.88	Depth 1407 1438 1468 1499 1532 1563 1626 1657 1688 1720 1751	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.84	Azimuth 190.30 190.50 201.30 218.50 206.70 194.00 187.20 198.70 202.10 202.10 179.00	DEVIATI DL Angle 1.35 0.39 0.47 0.83 1.13 0.29 0.65 1.29 0.65 1.23	Depth 2244 2275 2306 2337 2367 2399 2429 2450 2492	Deviation 2.27 2.24 2.06 2.05 1.48 1.22 0.96 0.96 0.96	Astmuth 147.80 156.90 158.70 157.60 163.20 170.70 171.90 171.20 170.80 183.70	Sample Descr Sample Descr DL Angle 0.88 1.11 0.64 0.13 0.73 1.62 0.87 0.34 0.01	Depth 3103 3133 3165 3226 3257 3283 3320 3350	Blackhawk 60% Sitst, c 0% Sitst, c 1.06 1.02 1.15 1.45 1.33 1.40 1.40	3420° 1074 Ss., tr - 576 Azimuth 174.90 175.60 174.00 167.30 169.60 155.00 155.00 152.50	28,4 ate 3110' 4 Coal DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54
MULATIVE BACK BROWND Depth 538 660 602 633 669 727 757 787 817 844 907	Deviation GAS Deviation 1.22 1.29 1.34 1.28 1.33 1.44 1.43 0.84 0.71	Azimuth 184.79 185.53 186.87 185.91 180.49 175.88 184.40 182.92 175.88 184.40 182.92 175.88 183.91	PROM (N) see first page DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51	Depth 1407 1438 1468 1499 1532 1595 1626 1688 1720 1751 1782	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93	Azimuth 190.50 190.50 201.30 218.50 206.70 194.00 197.20 196.70 202.10 202.10 179.00 157.60 164.00	DEVIATI DL Angle 1.35 0.39 0.47 0.83 1.08 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 0.43	Depth 2244 2275 2306 2337 2367 2399 2429 2452 2553 2554 2614	VEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.96 0.96 0.91 1.23 1.10 1.10	Asimuth 147.80 156.50 155.70 157.60 163.20 170.70 171.70 171.70 171.20 170.60 183.70 183.70	DL Angle 0.86 1.11 0.73 0.73 0.87 0.84 0.01 0.17 1.07 0.62 0.87	Depth 3103 3133 3165 3196 3226 3257 3288 3320 3381 3413 3472	Daviation 1.08 1.02 1.15 1.26 1.40 1.40 1.19 1.19 1.19 1.19 1.19 1.19 1.19 1.1	3420' 10' Ss, tr - 5' Azimuth 174.90 175.60 177.00 167.30 169.60 155.00 152.50 154.50 154.50 158.80	28,4 ate 3110' 4 Coal DL Angle 0.96 0.14 0.42 0.53 0.66 0.40 0.82 0.31 0.54 0.79 0.33
MULATIVE BACK BACK BROWND Depth 538 566 633 664 6727 757 787 787 314 344 876 997 936	Deviation OAS Deviation 1.22 1.20 1.25 1.34 1.28 1.33 1.48 1.43 0.84 0.71 0.88	Aslmuth 184.79 195.53 186.87 180.49 180.49 180.29 175.88 164.40 162.92 155.82 143.19 137.08	PROM (t) 200 First page (t) 200 First page (t) 201	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1637 1638 1720 1751 1782 1813	Deviation 0.89 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 197.20 196.70 202.10 202.10 197.80 157.60 157.60	DEVIATI DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 1.29 1.20 1.20 1.20 1.20 1.20 1.20 1.20 1.20	ON SUR Depth 2244 2275 2306 2337 2367 2399 2429 2450 2492 2553 2554 2614 2644	VEYS Deviation 2.27 2.24 2.06 1.95 1.48 1.22 0.96 0.96 0.98 1.23 1.10 1.30 1.60	Azimuth 147.80 156.50 155.70 177.00 1771.90 177.60 183.70 157.60 163.20 170.10 171.70 171.80 171.40 171.40 171.40 171.50 170.60 183.70 157.40 185.40	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.80	Depth 3103 3193 3196 3226 3257 3288 3320 3350 3381 3413 3443 3472 3503	Blackhawk 60% Sitist, 4 1.06 1.02 1.15 1.26 1.45 1.36 1.40 1.40 1.12 1.09 1.16 1.19	3420° 1074 Ss, tr - 576 Azimuth 174.90 175.60 174.00 167.30 169.60 155.00 155.00 152.50 154.50 159.00 152.50 154.50 159.80 160.20	28,4 ate 3110' 4 Coal DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
MULATIVE BACK BACK BROWND Depth 538 660 633 669 727 757 757 817 344 897	Deviation GAS Deviation 1.22 1.29 1.34 1.28 1.33 1.44 1.43 0.84 0.71	Azimuth 184.79 185.53 186.87 185.91 180.49 175.88 184.40 182.92 175.88 184.40 182.92 175.88 183.91	PROM (N) see first page DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51	Depth 1407 1438 1468 1499 1532 1595 1626 1688 1720 1751 1782	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93	Azimuth 190.50 190.50 201.30 218.50 206.70 194.00 197.20 196.70 202.10 202.10 179.00 157.60 164.00	DEVIATI DL Angle 1.35 0.39 0.47 0.83 1.08 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 0.43	Depth 2244 2275 2306 2337 2367 2399 2429 2452 2553 2554 2614	VEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.96 0.96 0.91 1.23 1.10 1.10	Asimuth 147.80 156.50 155.70 157.60 163.20 170.70 171.70 171.70 171.20 170.60 183.70 183.70	DL Angle 0.86 1.11 0.73 0.73 0.87 0.84 0.01 0.17 1.07 0.62 0.87	Depth 3103 3133 3165 3196 3226 3257 3288 3320 3381 3413 3472	Daviation 1.08 1.02 1.15 1.26 1.40 1.40 1.19 1.19 1.19 1.19 1.19 1.19 1.19 1.1	3420° 1074 Ss, tr - 576 Azimuth 174.90 175.60 174.00 167.30 169.60 155.00 155.00 152.50 154.50 159.00 152.50 154.50 159.80 160.20	28,4 ate 3110' 4 Coal DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
MULATIVE MULATIVE MULATIVE MULATIVE MULATIVE BACK BROWND 538 566 602 633 664 695 775 777 817 344 876 997 9936 9971 1034	Deviation OAS Deviation OAS Deviation 1.03 1.22 1.20 1.25 1.34 1.28 1.34 1.33 1.44 0.84 0.71 0.88 0.50 0.91 1.00	Azimuth 184.79 195.53 186.87 185.91 180.49 180.29 175.85 164.40 162.92 143.19 137.08 130.59 112.85 107.94	PROM (t) 200 First page (t) 200 First page (t) 201	Depth 1407 1438 1498 1532 1583 1595 1626 1857 1638 1720 1751 1782 1813 1844 1875 1906	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.38 0.84 0.93 1.12 1.05 1.18 1.30	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 197.20 196.70 202.10 202.10 179.00 157.60 149.00 149.00 158.00 149.00	DEVIATI DLAngle 1.35 0.39 0.47 1.08 1.13 0.29 0.43 1.29 0.43 1.29 0.65 1.23 1.04 0.59 0.83	ON SUR Depth 2244 2275 2306 2337 2367 2397 2429 2450 2492 2553 2554 2614 2614 2672 2703	VEYS Deviation 2.27 2.24 2.06 1.95 1.48 0.96 0.96 0.91 1.23 1.10 1.30 1.60 1.58 1.66 1.58	Asimuth 147.80 156.50 155.70 157.00 171.90 171.90 157.40 163.70 155.40 163.70 175.40 175.40 175.40 175.40 175.40 175.40 175.40 175.40 177.10 177.10 177.10 177.10 177.10 177.10 177.10 177.10 175.40 175.40 175.40 175.40 175.40 175.40 177.10 1	DL Angle 0.65 1.11 0.64 0.13 0.73 1.62 0.87 0.34 0.01 1.07 0.62 0.80 1.20 0.18	Depth 3103 3193 3196 3226 3257 3283 3320 3350 3381 3413 3443 3472 3503 3598 3688 3748	Blackhawk 60% Sitist, 4 60% Si	3420° 1074 Ss, tr - 576 Azimuth 174.90 175.60 174.00 167.30 169.60 155.00 155.00 152.50 154.50 159.00 152.50 154.50 159.80 160.20	28,4 ate 3110' 4 Coal DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
MULATIVE BACK BACK BROWND Depth 536 602 633 664 695 727 787 817 817 817 1034 1066 1097	Deviation GAS Deviation 1.03 1.22 1.20 1.25 1.34 1.33 1.43 1.43 0.84 0.71 0.88 0.50 0.91	Asimuth 194.79 189.59 180.49 100.29 175.88 164.40 162.92 155.82 143.19 130.59 112.85 107.94 109.50 120.70	DL Angle 0.19 0.76 0.17 0.26 0.36 0.26 0.36 0.40 0.12 0.68 0.51 0.95 1.04 0.65 0.65 0.62	Depth 1407 1438 1499 1532 1563 1595 1626 1657 1688 1720 1751 1782 1813 1844 1875 1906 1935	Deviation 0.89 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.18 1.30 1.75	Azimuth 190.80 190.80 190.50 201.30 218.50 206.70 194.00 187.20 198.70 202.10 202.10 202.10 157.60 164.00 149.00 158.00 158.00 158.00	DEVIATI DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 0.43 1.29 0.65 0.59 0.53	ON SUR Depth 2244 2275 2306 2337 2367 2399 2449 2452 2553 2554 2614 2672 2703 2734 2784	VEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.96 0.96 0.91 1.23 1.10 1.30 1.58 1.66 1.58 1.66 1.52 1.77	Azimuth 147.60 156.50 157.00 171.20 157.40 163.70 163.70 177.40 177.90	DL Angle O.66 0.68 1.11 0.64 0.13 0.73 1.62 0.87 0.64 0.01 0.17 1.07 0.62 0.80 1.20 0.18 0.48 1.20 0.18	Depth 3103 3133 3165 3196 3226 3257 3258 3350 3381 3443 3447 3559 3568 3748 3810	Blackhawk 60% Sitst, c 60% Sits, c 60% Sitst, c 60% Sits, c	3420° 1074 Ss, tr - 576 Azimuth 174.90 175.60 174.00 167.30 169.60 155.00 155.00 152.50 154.50 159.00 152.50 154.50 159.80 160.20	25,6 ate 3110' 4 Coal DL Angle 0.96 0.14 0.42 0.55 0.66 0.40 0.52 0.31 0.54 0.79 0.33 0.23
MULATIVE BACK BROWN 538 586 602 623 664 695 757 757 787 314 376 997 938 971 1034	Deviation OAS Deviation OAS Deviation 1.03 1.22 1.20 1.25 1.34 1.28 1.34 1.33 1.44 0.84 0.71 0.88 0.50 0.91 1.00	Azimuth 184.79 195.53 186.87 185.91 180.49 180.29 175.85 164.40 162.92 143.19 137.08 130.59 112.85 107.94	PROM (t) 200 First page (t) 200 First page (t) 201	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1638 1720 1751 1762 1813 1844 1875 1906	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.38 0.84 0.93 1.12 1.05 1.18 1.30	Azimuth 190.50 201.30 218.50 206.70 194.00 187.20 198.70 202.10 202.10 179.00 164.00 149.00 157.60 164.00 149.00 158.00 165.00 161.00	DEVIATI DL Angle 1.35 0.39 0.47 0.83 1.08 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 0.43 1.06 0.59 0.43 1.06 0.59 0.50	Depth 2244 2275 2306 2337 2367 2399 2429 2452 2553 2553 2554 2614 2644 2670 2734 2734 2734 2266	VEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.96 0.96 0.91 1.23 1.30 1.60 1.60 1.60 1.82 1.77	Astmuth 147.80 156.70 170.10 171.20 177.60 183.70 187.40 185.40 1	DL Angle 0.86 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.80 1.10 0.	Depth 3103 3193 3196 3226 3257 3283 3320 3350 3381 3413 3443 3472 3503 3598 3688 3748	Blackhawk 60% Sitist, 4 60% Si	3420° 1074 Ss, tr - 576 Azimuth 174.90 175.60 174.00 167.30 169.60 155.00 155.00 152.50 154.50 159.00 152.50 154.50 159.80 160.20	25,6 ate 3110' 4 Coal DL Angle 0.96 0.14 0.42 0.55 0.66 0.40 0.52 0.31 0.54 0.79 0.33 0.23
MULATIVE BACK BACK BROWN BROWN BRO	Deviation GAS Deviation 1.03 1.22 1.20 1.25 1.34 1.28 1.32 1.33 1.48 0.71 1.43 0.84 0.71 1.08 0.50 0.91 1.00 1.04 1.16 1.19	Asimuth 194.79 180.29 178.81 180.29 175.88 184.40 162.92 155.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30	PROM (tt) See first page DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.49 0.12 0.68 0.51 0.95 1.04 0.65 0.65 0.62 0.40 0.53 0.33 0.33	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1751 1782 1814 1875 1906 1935 1967	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.18 1.30 1.75	Azimuth 190.80 190.80 190.50 201.30 218.50 206.70 194.00 187.20 198.70 202.10 202.10 202.10 157.60 164.00 149.00 158.00 158.00 158.00	DEVIATI DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 0.43 1.29 0.65 0.59 0.53	ON SUR Depth 2244 2275 2306 2337 2367 2399 2449 2452 2553 2554 2614 2672 2703 2734 2784	VEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.96 0.96 0.91 1.23 1.10 1.30 1.58 1.66 1.58 1.66 1.52 1.77	Azimuth 147.60 156.50 157.00 171.20 157.40 163.70 163.70 177.40 177.90	DL Angle O.66 0.68 1.11 0.64 0.13 0.73 1.62 0.87 0.64 0.01 0.17 1.07 0.62 0.80 1.20 0.18 0.48 1.20 0.18	Depth 3103 3133 3165 3196 3226 3257 3258 3350 3381 3443 3447 3559 3568 3748 3810	Blackhawk 60% Sitst, c 60% Sits, c 60% Sitst, c 60% Sits, c	3420° 1074 Ss, tr - 576 Azimuth 174.90 175.60 174.00 167.30 169.60 155.00 155.00 152.50 154.50 159.00 152.50 154.50 159.80 160.20	28,4 ate 3110' 4 Coal DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
MULATIVE BACK BACK BROWND Depth 538 692 633 684 695 727 787 817 847 907 1034 1096 1096 11191 11221	Deviation Colon Co	Asimuth 184.79 189.53 186.87 180.49 190.29 175.88 194.40 192.92 155.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.57	PROM (8) See first page DL Angle 0.19 0.76 0.117 0.21 0.86 0.36 0.26 0.36 0.12 0.68 1.29 0.68 1.29 0.68 1.29 0.68 1.20 0.68 0.51 0.95 1.09 0.51 0.95 0.51 0.95 0.62 0.40 0.53 0.33 0.62	Depth 1407 1438 1468 1499 1532 1563 1595 1628 1720 1751 1762 1813 1844 1875 1906 1935 1987 1997 2028 2060	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.18 1.30 1.75 1.76 1.61 1.91	Azimuth 190.30 190.50 201.30 218.50 205.70 194.00 187.20 198.70 202.10 202.10 179.00 157.60 164.00 149.00 158.00 165.00 161.00 158.00 161.00 158.40 164.20 154.40	DEVIATI DEAngle 1.35 0.39 0.47 0.83 1.08 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 0.43 1.06 0.59 0.83 0.54 1.59 0.50 0.39 1.59	ON SUR Depth 2244 2275 2306 2337 2367 2399 2429 2460 2492 2553 2554 2614 2644 2672 2703 2734 2784 2826 28367	VEYS Deviation 2.27 2.24 2.05 1.95 1.98 0.96 0.91 1.23 1.10 1.30 1.60 1.60 1.52 1.66 1.52 1.70 1.30 1.60 1.52 1.60 1.52 1.60 1.52 1.60 1.52 1.60 1.52 1.60 1.52 1.60 1.52 1.60 1.52 1.60 1.52 1.70 1.30 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Asimuth 147.80 156.50 158.70 157.60 163.20 170.70 171.90 171.20 170.83.70 183.70	DL Angle 0.86 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.80 1.20 0.18 0.48 1.02 0.25 0.79 0.94 1.01 0.72	Depth 3103 3133 3165 3196 3226 3257 3258 3350 3381 3443 3447 3559 3568 3748 3810	Blackhawk 60% Sitst, c 60% Sits, c 60% Sitst, c 60% Sits, c	3420° 1074 Ss, tr - 576 Azimuth 174.90 175.60 174.00 167.30 169.60 155.00 155.00 152.50 154.50 159.00 152.50 154.50 159.80 160.20	28, ate 3110' 4 Coal DL Angle 0.96 0.14 0.42 0.53 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
MULATIVE BACK BROWND 538 586 602 633 664 695 757 787 314 376 990 1012 1015 1015 11159 11159 11159 11159	Deviation OAS DATA (n) OAS D	Asimuth 184.79 185.53 186.87 186.87 186.89 175.88 194.40 195.82 197.30 112.95	PROM (t) 200 First page (t) 200 First page (t) 201	Depth 1407 1438 1498 1532 1583 1595 1626 1638 1720 1751 1762 1813 1844 1875 1906 1935 1967 2028 2060 2091	Deviation 0.699 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.18 1.30 1.75 1.70 1.61 1.91 1.88	Azimuth 190,80 190,50 201,30 218,50 206,70 194,00 196,70 202,10 202,10 179,00 158,60 152,00 156,00 158,00 158,00 158,00 158,00 158,40 154,00 158,40 154,50 155,50 1	DEVIATI DL Angle 1.35 0.39 0.47 1.08 1.10 0.29 0.43 1.23 1.04 0.29 0.43 1.06 0.59 0.39 0.54 1.59 0.50 0.39 1.11 1.50 0.39	ON SUR Depth 2244 2275 2306 2337 2367 2399 2429 2450 2492 2523 2553 2554 2614 2644 2672 2703 2734 2784 2846 2856 2837 2819	VEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.96 0.96 1.30 1.80 1.58 1.66 1.82 1.77 1.30 1.80 1.58 1.77 1.30 1.80 1.80 1.80 1.80 1.80 1.80 1.80 1.8	Asimuth 147.80 156.50 155.70 177.00 171.00 165.40 165.40 165.40 165.40 166.10 177.10 177.90 177.10 1	DL Angle 0.86 1.11 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.80 1.20 0.18 0.48 1.02 0.25 0.79 0.94 1.01 0.72	Depth 3103 3133 3165 3196 3226 3257 3258 3350 3381 3443 3447 3559 3568 3748 3810	Blackhawk 60% Sitst, c 60% Sits, c 60% Sitst, c 60% Sits, c	3420° 1074 Ss, tr - 576 Azimuth 174.90 175.60 174.00 167.30 169.60 155.00 155.00 152.50 154.50 159.00 152.50 154.50 159.80 160.20	28,4 ate 3110' 4 Coal DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
MULATIVE BACK BROWNS 538 680 693 757 767 787 817 817 817 907 1034 1096 1096 1119 1119 11221	Deviation Colon Co	Asimuth 184.79 189.53 186.87 180.49 190.29 175.88 194.40 192.92 155.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.57	DL Angle 0.19 0.76 0.17 0.26 0.36 0.36 0.36 0.48 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.80 0.40 0.53 0.33 0.82 1.48 2.30 0.51	Depth 1407 1438 1468 1499 1532 1563 1595 1628 1720 1751 1762 1813 1844 1875 1906 1935 1987 1997 2028 2060	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.18 1.30 1.75 1.76 1.61 1.91	Azimuth 190.30 190.50 201.30 218.50 205.70 194.00 187.20 198.70 202.10 202.10 179.00 157.60 164.00 149.00 158.00 165.00 161.00 158.00 161.00 158.40 164.20 154.40	DEVIATI DEAngle 1.35 0.39 0.47 0.83 1.08 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 0.43 1.06 0.59 0.83 0.54 1.59 0.50 0.39 1.59	ON SUR Depth 2244 2275 2306 2337 2367 2399 2429 2460 2492 2553 2554 2614 2644 2672 2703 2734 2784 2826 28367	VEYS Deviation 2.27 2.24 2.05 1.95 1.98 0.96 0.91 1.23 1.10 1.30 1.60 1.60 1.52 1.66 1.52 1.70 1.30 1.60 1.52 1.60 1.52 1.60 1.52 1.60 1.52 1.60 1.52 1.60 1.52 1.60 1.52 1.60 1.52 1.60 1.52 1.70 1.30 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Asimuth 147.80 156.50 158.70 157.60 163.20 170.70 171.90 171.20 170.83.70 183.70	DL Angle 0.86 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.80 1.20 0.18 0.48 1.02 0.25 0.79 0.94 1.01 0.72	Depth 3103 3133 3165 3196 3226 3257 3258 3350 3381 3443 3447 3559 3568 3748 3810	Blackhawk 60% Sitst, c 60% Sits, c 60% Sitst, c 60% Sits, c	3420° 1074 Ss, tr - 576 Azimuth 174.90 175.60 174.00 167.30 169.60 155.00 155.00 152.50 154.50 159.00 152.50 154.50 159.80 160.20	28,4 ate 3110' 4 Coal DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
MULATIVE MULATI	Deviation OBS DATA (n) OBS D	Asimuth 184.79 189.53 186.87 185.91 180.29 175.88 184.40 182.92 155.82 143.19 137.08 102.92 156.87 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75 203.90 173.03 172.10	PROM (t) 200 PROM (t) 200 PROM (t) 200 PROM (t) 21 PRO	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1637 1638 1720 1751 1762 1813 1844 1875 1906 1935 1967 2028 2060 2091 2120 2152 2183	Deviation 0.699 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.18 1.30 1.75 1.76 1.61 1.91 1.88 1.95 1.88 1.95 1.74 1.99 2.03	Azimuth 190,80 180,50 201,30 218,50 206,70 194,00 187,20 196,70 202,10 202,10 179,00 155,60 155,00 164,00 158,00 164,00 158,00 165,00 155,00 1	DEVIATI DL Angle 1.35 0.39 0.47 1.08 1.10 0.29 0.43 1.08 1.08 1.13 0.29 0.43 1.09 0.43 1.09 0.43 1.09 0.43 1.09 0.43 1.09 0.43 1.09 0.43 1.09 0.43 1.09 0.43 1.09 0.43 1.09 0.43 1.09 0.43 1.09 0.43 1.09 0.43 1.09 0.43 1.09 0.59 0.39 1.10 0.59 0.39 1.11 1.05 0.39 0.10 0.39 0.10 0.30 0.30 0.30 0.30 0.30 0.30 0.30	ON SUR Depth 2244 2275 2306 2337 2367 2399 2429 2450 2492 2523 2553 2554 2614 2644 2672 2703 2734 2784 2826 2856 2837 2919 2951 2981 3013 30142	VEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.96 0.96 1.30 1.60 1.52 1.77 1.30 1.60 1.52 1.77 1.30 1.60 1.82 1.77 1.30 1.60 1.82 1.77 1.30 1.80 1.80 1.80 1.80 1.80 1.80 1.80 1.8	Asimuth 147.80 156.50 155.70 157.60 163.20 170.10 171.70 171.90 157.60 163.70 165.40 1	DL Angle 0.86 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.80 1.20 0.18 1.02 0.25 0.79 0.94 1.01 0.72 0.78 0.94 1.01 0.72 0.78 0.94 1.01 0.79 0.94 1.01 0.79 0.94 1.01 0.79 0.94 1.01 0.79 0.94 1.01 0.79 0.94 1.01 0.79 0.94 1.01 0.79 0.94 1.01 0.79 0.94 1.01 0.79 0.94 1.01 0.79 0.94 1.01 0.79 0.98	Depth 3103 3133 3165 3196 3226 3257 3258 3350 3381 3443 3447 3559 3568 3748 3810	Blackhawk 60% Sitst, c 60% Sits, c 60% Sitst, c 60% Sits, c	3420° 1074 Ss, tr - 576 Azimuth 174.90 175.60 174.00 167.30 169.60 155.00 155.00 152.50 154.50 159.00 152.50 154.50 159.80 160.20	28, ate 3110' 4 Coal DL Angle 0.96 0.14 0.42 0.53 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
MULATIVE BACK ROUND Depth 538 538 562 633 685 727 787 317 317 314 376 997 11034 1006 1006 10128 11159 11251 1252 13131 1314	Deviation Constitution muth 184.79 189.53 186.87 180.91 190.29 175.88 194.40 192.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 195.70 235.75 203.90	DL Angle 0.19 0.76 0.17 0.26 0.36 0.36 0.36 0.48 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.80 0.40 0.53 0.33 0.82 1.48 2.30 0.51	Depth 1407 1438 1468 1499 1532 1563 1595 1628 1720 1751 1762 1813 1844 1875 1906 1935 1987 1997 2028 2060 2091 2120	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.18 1.30 1.75 1.76 1.61 1.91 1.88 1.95 1.74	Azimuth 190.30 190.50 201.30 218.50 205.70 194.00 187.20 198.70 202.10 202.10 179.00 149.00 149.00 149.00 157.60 164.00 149.00 161.00 158.40 165.00 161.00 158.40 164.20 154.10 155.20 148.50	DEVIATION (N) AFTER (N) AF	Depth 2244 2275 2306 2337 2367 2399 2429 2452 2553 2553 2554 2614 2644 2672 2703 2734 2266 2357 2399 2492 2523 2554 2614 2642 2672 2703 2734 2764 2826 2856 2857 2919 2951 2931 3013	VEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.96 0.96 0.96 0.91 1.23 1.10 1.30 1.60 1.52 1.77 1.30 1.60 1.52 1.77 1.30 1.00 0.90 0.90 0.90 0.90 0.90	Asimuth 147.80 156.50 158.70 157.60 163.20 170.70 171.20 171.20 175.40 163.40 1	DL Angle 0.86 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.80 1.10 0.48 1.02 0.29 0.79 0.94 1.01 0.72 0.78 0.79 0.94	Depth 3103 3133 3165 3196 3226 3257 3258 3350 3381 3443 3447 3559 3568 3748 3810	Blackhawk 60% Sitst, c 60% Sits, c 60% Sitst, c 60% Sits, c	3420° 1074 Ss, tr - 576 Azimuth 174.90 175.60 174.00 167.30 169.60 155.00 155.00 152.50 154.50 159.00 152.50 154.50 159.80 160.20	25,6 ate 3110' 4 Coal DL Angle 0.96 0.14 0.42 0.55 0.66 0.40 0.52 0.31 0.54 0.79 0.33 0.23	
MULATIVE MCC ROUND PS 25 86 802 803 864 805 727 757 781 344 876 997 910 14 10066 1007 11129 11129 11129 11129 11129 11121 11221 11221 1123 11314 11346	Deviation OBS DATA (n) OBS D	Asimuth 184.79 189.53 186.87 185.91 180.29 175.88 184.40 182.92 155.82 143.19 137.08 102.92 156.87 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75 203.90 173.03 172.10	PROM (t) 200 PROM (t) 200 PROM (t) 200 PROM (t) 21 PRO	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1637 1638 1720 1751 1762 1813 1844 1875 1906 1935 1967 2028 2060 2091 2120 2152 2183	Deviation 0.699 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.18 1.30 1.75 1.76 1.61 1.91 1.88 1.95 1.88 1.95 1.74 1.99 2.03	Azimuth 190,80 180,50 201,30 218,50 206,70 194,00 187,20 196,70 202,10 202,10 179,00 155,60 155,00 164,00 158,00 164,00 158,00 165,00 155,00 1	DEVIATI DL Angle 1.35 0.39 0.47 1.08 1.10 0.29 0.43 1.08 1.08 1.13 0.29 0.43 1.09 0.43 1.09 0.43 1.09 0.43 1.09 0.43 1.09 0.43 1.09 0.43 1.09 0.43 1.09 0.43 1.09 0.43 1.09 0.43 1.09 0.43 1.09 0.43 1.09 0.43 1.09 0.43 1.09 0.59 0.39 1.10 0.59 0.39 1.11 1.05 0.39 0.10 0.39 0.10 0.30 0.30 0.30 0.30 0.30 0.30 0.30	ON SUR Depth 2244 2275 2306 2337 2367 2399 2429 2450 2492 2523 2553 2554 2614 2644 2672 2703 2734 2784 2826 2856 2837 2919 2951 2981 3013 30142	VEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.96 0.96 1.30 1.60 1.52 1.77 1.30 1.60 1.52 1.77 1.30 1.60 1.82 1.77 1.30 1.60 1.82 1.77 1.30 1.80 1.80 1.80 1.80 1.80 1.80 1.80 1.8	Asimuth 147.80 156.50 155.70 157.60 163.20 170.10 171.70 171.90 157.60 163.70 165.40 1	DL Angle 0.86 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.80 1.20 0.18 1.02 0.25 0.79 0.94 1.01 0.72 0.78 0.94 1.01 0.72 0.78 0.94 1.01 0.79 0.94 1.01 0.79 0.94 1.01 0.79 0.94 1.01 0.79 0.94 1.01 0.79 0.94 1.01 0.79 0.94 1.01 0.79 0.94 1.01 0.79 0.94 1.01 0.79 0.94 1.01 0.79 0.94 1.01 0.79 0.98	Depth 3103 3133 3165 3196 3226 3257 3258 3350 3381 3443 3447 3559 3568 3748 3810	Blackhawk 60% Sitst, c 60% Sits, c 60% Sitst, c 60% Sits, c	3420° 1074 Ss, tr - 576 Azimuth 174.90 175.60 174.00 167.30 169.60 155.00 155.00 152.50 154.50 159.00 152.50 154.50 159.80 160.20	26,6 ate 3110' 4 Coal DL Angle 0.96 0.14 0.42 0.55 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
MULATIVE MULATI	Deviation OBS DATA (n) OBS D	Asimuth 184.79 189.53 186.87 185.91 180.29 175.88 184.40 182.92 155.82 143.19 137.08 102.92 156.87 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75 203.90 173.03 172.10	PROM (t) 200 PROM (t) 200 PROM (t) 200 PROM (t) 21 PRO	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1637 1638 1720 1751 1762 1813 1844 1875 1906 1935 1967 2028 2060 2091 2120 2152 2183	Deviation 0.699 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.18 1.30 1.75 1.76 1.61 1.91 1.88 1.95 1.88 1.95 1.74 1.99 2.03	Azimuth 190.80 190.80 201.30 218.50 201.30 218.50 206.70 194.00 187.20 198.70 202.10 202.10 179.00 157.60 184.00 149.00 158.00 161.00 158.40 164.50 155.00 164.00 154.10 155.20	DEVIATI PLAngle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.65 1.23 1.06 0.50 0.39 0.43 1.06 0.50 0.39 1.51 1.52 0.65 1.23 1.06 0.50 0.83 0.54 1.59 0.50 0.39 1.12 1.05 0.66 0.13 1.52	ON SUR Depth 2244 2275 2306 2337 2367 2399 2429 2460 2452 2553 2554 2614 2644 2672 2703 2734 2764 2826 2856 2837 2919 2951 3013 3042 3072	VEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.96 0.91 1.23 1.10 1.30 1.60 1.52 1.77 1.30 1.20 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0	Asimuth 147.80 156.50 155.70 157.60 163.20 170.10 171.70 171.90 157.60 163.70 165.40 1	DL Angle 0.86 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.80 1.20 0.18 1.02 0.25 0.79 0.94 1.01 0.72 0.78 0.94 1.01 0.72 0.78 0.94 1.01 0.79 0.94 1.01 0.79 0.94 1.01 0.79 0.94 1.01 0.79 0.94 1.01 0.79 0.94 1.01 0.79 0.94 1.01 0.79 0.94 1.01 0.79 0.94 1.01 0.79 0.94 1.01 0.79 0.94 1.01 0.79 0.98	Depth 3103 3133 3165 3196 3226 3257 3258 3350 3381 3443 3447 3559 3568 3748 3810	Blackhawk 60% Sitst, c 60% Sits, c 60% Sitst, c 60% Sits, c	3420° 1074 Ss, tr - 576 Azimuth 174.90 175.60 174.00 167.30 169.60 155.00 155.00 152.50 154.50 159.00 152.50 154.50 159.80 160.20	25,6 ate 3110' 4 Coal DL Angle 0.96 0.14 0.42 0.55 0.66 0.40 0.52 0.31 0.54 0.79 0.33 0.23
MULATIVE BACK ROUND	Deviation OBS DATA (n) OBS D	Asimuth 184.79 189.53 186.87 185.91 180.29 175.88 184.40 182.92 155.82 143.19 137.08 102.92 156.87 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75 203.90 173.03 172.10	PROM (t) 200 PROM (t) 200 PROM (t) 200 PROM (t) 21 PRO	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1637 1638 1720 1751 1762 1813 1844 1875 1906 1935 1967 2028 2060 2091 2120 2152 2183	Deviation 0.699 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.18 1.30 1.75 1.76 1.61 1.91 1.88 1.95 1.88 1.95 1.74 1.99 2.03	Azimuth 190.80 190.80 201.30 218.50 201.30 218.50 206.70 194.00 187.20 198.70 202.10 202.10 179.00 157.60 184.00 149.00 158.00 161.00 158.40 164.50 155.00 164.00 154.10 155.20	DEVIATI DL Angle 1.35 0.39 0.47 1.08 1.10 0.29 0.43 1.08 1.08 1.13 0.29 0.43 1.09 0.43 1.09 0.43 1.09 0.43 1.09 0.43 1.09 0.43 1.09 0.43 1.09 0.43 1.09 0.43 1.09 0.43 1.09 0.43 1.09 0.43 1.09 0.43 1.09 0.43 1.09 0.43 1.09 0.59 0.39 1.10 0.59 0.39 1.11 1.05 0.39 0.10 0.39 0.10 0.30 0.30 0.30 0.31	ON SUR Depth 2244 2275 2306 2337 2367 2399 2429 2460 2452 2553 2554 2614 2644 2672 2703 2734 2764 2826 2856 2837 2919 2951 3013 3042 3072	VEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.96 0.91 1.23 1.10 1.30 1.60 1.52 1.77 1.30 1.20 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0	Asimuth 147.80 156.50 158.70 157.60 163.20 170.70 171.90 171.70 171.90 171.70 177.40 165.40 163.70 157.40 168.10 177.70 178.90 129.60 120.50 1	Sample perc	Depth 3103 3133 3165 3196 3226 3257 3283 3320 3381 3413 3472 3508 3686 3748 3810 3902	Blackhawk 60% Sitst, c 60% Sits, c 60% Sitst, c 60% Sits, c	3420° 4074 Ss, tr - 576 Azimuth 174.90 175.60 174.00 167.30 169.80 155.90 159.00 159.80 159.80 178.80	26,5 ate 3110' 4 Coal DL Angle 0.98 0.14 0.42 0.53 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23 1.52
MULATIVE MULATIVE MULATIVE MULATIVE MULATIVE MULATIVE MULATIVE STANDARD STANDA	Deviation OBS DATA (n) OBS D	Asimuth 184.79 189.53 186.87 185.91 180.29 175.88 184.40 182.92 155.82 143.19 137.08 102.92 156.87 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75 203.90 173.03 172.10	PROM (8) see first page DL Angle 0.19 0.76 0.17 0.21 0.88 0.28 0.36 0.49 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.85 0.80 0.40 0.53 0.33 0.33 0.82 1.44 2.30 0.51 0.55 0.28 0.30	Depth 1407 1438 1468 1499 1532 1563 1595 1628 1720 1751 1762 1813 1844 1875 1996 1997 2028 2060 2091 2120 2152 2183 2213	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.18 1.30 1.75 1.70 1.61 1.91 1.88 1.95 1.74 1.99 2.03 2.42	Azimuth 190.00 190.50 201.30 218.50 206.70 194.00 187.20 188.70 202.10 202.10 179.00 149.00 149.00 157.60 164.00 149.00 158.00 161.00 158.40 165.00 155.00 164.00 164.00	DEVIATION (%) DEVIATION (%) 1.35 0.39 0.47 1.08 1.13 0.29 0.43 1.29 0.43 1.29 0.43 1.06 0.59 0.39 1.12 1.06 0.59 0.39 1.12 1.06 0.59 0.39 1.12 1.05 0.39 1.12 1.05 0.39 1.12 1.05 0.39 1.12 1.05 0.39 1.12 1.05 0.39 1.12 1.05 0.39 1.12 1.05 0.39 1.12 1.05 0.39 1.12 1.05 0.39 1.12 1.05 0.39 1.12 1.05 0.39 1.12 1.05 0.39 1.12	ON SUR Depth 2244 2275 2306 2337 2367 2399 2429 2460 2492 2553 2553 2554 2614 2644 2672 2703 2734 2784 2819 2919 2951 2931 3013 3042 3072	VEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.96 0.96 1.58 1.66 1.82 1.77 1.30 1.80 1.58 1.60 1.82 1.77 1.30 1.00 1.00 1.00 1.00	Asimuth 147.80 156.50 158.70 157.60 163.20 170.70 171.90 171.70 171.90 171.70 177.40 165.40 163.70 157.40 168.10 177.70 178.90 129.60 120.50 1	DL Angle 0.86 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.80 1.20 0.18 1.02 0.25 0.79 0.94 1.01 0.72 0.78 0.94 1.01 0.72 0.78 0.94 1.01 0.79 0.94 1.01 0.79 0.94 1.01 0.79 0.94 1.01 0.79 0.94 1.01 0.79 0.94 1.01 0.79 0.94 1.01 0.79 0.94 1.01 0.79 0.94 1.01 0.79 0.94 1.01 0.79 0.94 1.01 0.79 0.98	Depth 3103 3133 3165 3196 3226 3257 3283 3320 3381 3413 3472 3508 3686 3748 3810 3902	Blackhawk 60% Sitst, c 60% Sits, c 60% Sitst, c 60% Sits, c	3420° 1074 Ss, tr - 576 Azimuth 174.90 175.60 174.00 167.30 169.60 155.00 155.00 152.50 154.50 159.00 152.50 154.50 159.80 160.20	26,4 ate 3110' 4 Coal DL Angle 0.96 0.14 0.42 0.53 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23 1.52

						P	UMP & C	IRCULAT	ING DATA	\						
l i	i 1		LINER	STROKE	ASSUMED	PUMP		PUMP		CIRC	CULATING DETA	ILS		ANNULAR VE	LOCITY	
MUD	1		SIZE	LENGTH	EFF	RATE	vo	LUMETRIC DA	LTA .	Standpipe	Motor	HEP	DP	pc pc		
PUMPS	MAKE	MODEL	(ln)	(in)	(%)	(spm)	(bbls/stk)	(bbls/min)	(gal/min)	(psi)	Differential	(Sqln)	(ft/min)	(ft/min)		
NO. 1	National	7P50	6.25	7.75	95.00%	90	0.0736	6.29	264	1,210	no MM	3.09	155	327		
NO.2			-											1		
NO. 3																
COMBINED														†		

WELL NAME 43-0	02-30	118
Jensen 1-18		
LOCATION DATA		
NESE NW NW-Sec 16 T-129	S, R-10E	
130A FOOTAGES	GL	КВ
550 FNL 500 FWL	7569	7580

EVERGREEN OPERATING, INC. DAILY DRILLING REPORT

RIG CONTACT IN	FORMATION:
OFFICE TRAILER / FAX:	970 942 7543
CONSULTANT HAND CELL:	303 913 1054
DOGHOUSE:	307 258 7315
PUSHER:	

DATE SPUD DATE	SAM DEPTH
9/6/20044 . 8/16/2004	4156
REPORT NO.	24 HR FOOTAGE
21	150
DRLG CONTRACTOR	DAYS SINCE SPUD
Elenburg, Rig 12	21
CONSULTANT	AFE # API #
John C. Lamb	43-007-30718

ACTIVITY AT REPORT TIME:	DAILY COST		CUM COST		AFE COSTS	
Tripping out of hole to pick up coring tools	\$	13,455	\$	652,993	\$	-
Tripping out of hole to plak up coming tools						

СН	RONOLOG	SY OF DAIL	Y OPERATIONS (06:00 - 06:00 HRS)	SLOW	PUMP RA	TE DATA:		STRING	STRING WEIGHT INFORM				
FROM (hrs)	TO (hrs)	HOURS (hrs)	Activity:	Depth 4156	SPM 54	Pressure 400	Eff BHA Wt 40,017	Rotating: 112,000	Slackoff: 104,000	Hoisting: 115,000			
06:00	06:30	0.50	Wireline survey 3 3/4 deg at 3996										
06:30	07:00	0.50	After running survey, broke circulation with high pur	np pressure - ch	eck for res	triction in surf	ace equipment	 suspect prob 	able				
			plugged or restricted jet - decide to drill ahead at re	duced pump rate	e (90 SPM	- 6.29 bbl/min	or 264 gal/min) at 1250 psi					
07:00	07:45	0.75	Drill 4006 - 4021										
07:45	08:15	0.50	Circulate hole to establish if circulation rate is suffici	ient for lifting cut	tings to sur	face - saw no	rmal amount o	f cuttings retur	ning to surface				
			from coal drilling break 4015 - 4020'										
08:15	10:00	1.75	Drill 4021- 4036										
10:00	10:30	0.50	Service rig & check suction and discharge valves in	mud pump									
10:30	17:15	6.75	Drill 4036 - 4097										
17:15	17:45	0.50	Wireline survey 4 1/8 deg at 4087										
17:45	20:15	2.50	Drill 4097 - 4119										
20:15	21:30	1.25	Circulate for samples										
21:30	01:30	4.00	Drill 4119 - 4156										
01:30	02:00	0.50	Circulate for samples							,			
02:00	06:00	4.00	Drop survey and trip out of hole at core point										
		L											
									- prof prof	TWEN			
									mev	CIVED			
									DEC	1 3 2004			
									DLO				
									NV GE OIL	GAS & MINING			
								· · · · · ·	ALE. OF OIL				
						-							
TOTAL	IOURS	24.00											

	DAILY	CUM
DESC.	(hrs)	(hrs)
Drill	15.75	287.75
Trip	4.00	35.75
Circulate	2.75	7.25
Rig Repair		30.50
Rig Service	0.50	6.25
Dev Survey	1.00	2.75
NU / ND		21.00
Cement		2.50
Run Casing		8.00
woc		
OH Logging		
Mix Mud		
MI&RU		6.00
RatHole		
Mouse Hole		
Fishing		
Other		0.50
Coring		
Inspect BHA		
Cut drig line		1.25
Wash & Ream		1.25
Drill Cement		8.25
Test BOPE		3.50
woo		
PU/LD BHA		4.50
insp circ equip		3.50
TOTALS	24.00	430.50

COST CODE	DESCRIPTION OF DAILY COSTS		DAILY (\$)		CUM (S)		AFE (\$)	
2030.010	Land, Legal, Title, Survey, Arch, Damages, Permits, Signs	+	143				3.3	
2030.031	Dirtwork, Road, Location, Pits, Liner					-		_
2030.019	Contract Drilling 9480 / day 392.5 / h cond 5071 26,000 mob sfc 36791	\$	9,480	\$	264,032			
2032.001	Water	\$	1,120	\$	6,712			
2032.013	Drill Bits, Stabilizers, Reamers		· · · · · · · · · · · · · · · · · · ·	\$	42,500			
2031.046	Cementing and Services			\$	26,636			
2030.053	Coring and Analysis				-			
2030 052	Logging	-						
2030.054	Mud Logging	\$	750	\$	6,000			
2030.037	Rental Equipment	\$	1,305	\$	34,605			
2030.028	Transportation			\$	13,898			
2032.004	Mud and Chemicals			\$	28,661			
	Directional Services, Mud Motors			\$	106,512			
	Intermediate casing			\$	70,415			
2030.035	Contract Labor			\$	6,661			
2030.022	Engineering / Supervision	\$	800	\$	16,800			
2030.099	Intangible Miscellaneous and Contingencies							
2040.001	Surface Casing			\$	17,790			
2040.004	Production Casing							
011.000	Float Equipment, Shoes, Centralizers	1		\$	1,800			
041.000	Wellhead Equipment			\$	9,971			
1073.000	Bottom Hole Pump / Gas Lift / Other							
1104.000	Drivehead, Engine / Motor and Hydraulic Pump / Electric Unit							
2040.052 / 2040.055	Valves and Fittings, Small / Large				·			
2040.067	Other Surface Equipment							
2040.099	Tangible Miscellaneous and Contingencies							
	TOTAL COSTS	S	13,455	s	652,993	5		

eport #	21	Date:	09/06/04	me.	<u> ۲۵</u>		RILLING ensen 1-1		KI	<u> </u>			······································		Page 2
			Well Na	ime:	-	J.		T RECOR	D		- 4			····	
BUT	BiT		- 1 00 0000 - 1 00 0000	1	. —	DEPTH	DEPTH	FOOTAGE	CUM INT		T	Т -	BIT		ST GRADING
NO.	SIZE			SERIAL	JETS	HN .	our	DRILLED	HOURS	ROP	WOB	RPM	TORQUE	1. 2.	
0	(ln)	MFG	TYPE	NO.	(32/32/32)	(R)	(ft) 1,799	1,305	(hrs) 102.75	(Nhr)	36 - 43	MTR/TEL 45 / 60	(R - Ibe) 2100 - 2900		Seals Gge Dull (
2	12 1/4	Security		754840 10408516	14 / 14 / 14 / 1	1,799	2,698	899	83.25	12.7	35 - 40	45 / 45-70	1400 - 2200		
3	12 1/4	Smith	F4	MT6085	18 / 18 / 18	2,698	3,522	824	83.25	9.9	35 - 40	45 / 60	1600 - 2550		EEE1/2 RG TO
4	7 7/8	Smith	F57YOD	MT2530	12 / 13 / 12	3,522	4,156	634	68.50	9.3	23 - 28	55 - 60	1800 - 2400		
				_		ļ	.	0	 	#DIV/0!	1				
	 	-		 	-	 	1	0	ļ	#DIV/0!	-			 	
COM	MENTS	Bits 1,2&3 wt	th mud motor and di	rectional looks	; Bit 4 no mud mo	otor									
DEN	TAL EQUIP	MENT	T							CASING	DATA	1 30 880	17 11 1387		
ENTAL	DAILY	CUM	1	7.5		100,00	T	1000	EXTERNAL	INTERNAL		11 (11.01)	TOP	BOTTOM	
TEM	COSTS	COSTS		SIZE	WEIGHT	GRADE	CONIN	DRIFTID	COLLAPSE	YHELD	CAPACITY	LENGTH	SET AT	SET AT	
	(\$)	(\$)	4				ļ	3000	(pel)	(psi)	(6 bls/ft)	(ft):	(ft)	(n KB) 40.00	
ng Qins	\$ 315 \$ 45		1	30° 13 3/8°	NA 54.5	J55	ST&C	12.459	1,130	2,730	0.15450	500.00	2.00	498.00	
fank ft	\$ 60		1	8 5/8"	32	J55	ST&C	7.796	2,530	3,930	0.06090	3,545.00	0.00	3,520.00	
hn	\$ 20		1					L		<u> </u>		<u> </u>		l	<u> </u>
railer	\$ 50		l	.,	and a 17%				OTTOMU	DLE ASSE	MBIV		70 a 10000	111 B. J. S	
leaner	\$ 375 \$ 100	\$ 8,875 \$ 2,100		Tracilitae	ringija.		Transfer 1	1	OTTOMING	MAXIMUM	MINIMUM				Γ
iller	\$ 90							THRE	AD SIZE	O.D.	I.D.	LENGTH		HRS SINCE	A.A.
delm		\$ 975	DE	SCRIPTION OF	ВНА		VIDER	вох	PIN	(in)	(in)	(ft)	HOURS RUN	INSPECTION	
llars	ļ	\$ 5,585	∤	Bit			mith Ria	4100	4 1/2 R	7.875	2.500	1.00 2.90	78,50 78,50	78.50 78.50	
Sub	\$ 250	\$ 5,000	1	Bit sub riffith Shock	Sub		Rig pidle	4 1/2 R 4 1/2 XH	4 1/2 XH 4 1/2 XH	6.250	6.375	10.03	78.50	78.50	
	T			6 1/2° Drill (·	₹ig	4 1/2 XH	4 1/2 XH	6.500	2.313	525.85	78.50	78.50	
			2	- 4 1/2" HW	DP		₹ig	4 1/2 XH	4 1/2 XH	4.500	2.875	61.78	78.50	78.50	
	ļ	.	∤			-		+	-	-			 		
	 	 	1		*						†	 	l		
											I				
TALS	\$ 1,305	\$ 34,605				L		L	L		1		L	<u> </u>	
	. 1441	dî - 3;				1149	DRILLIN	G MUD R	EPORT	0.00					14.4884
MPLE		MUD	FUNNEL		1 1 1 1 1	GEL	FILTRATE	55 1850	CAKE		SAND				
PTH R)	TIME (hh:mm)	WT.	VISCOSITY (sec/qt)	PV/YP	ка. (%)	STRENGTH	API (ml/30 min)	CALCIUM (ppm)	THICKNESS (/32 in)	SOUDS (% vol)	CONTENT (% vol)	PH	CHLORIDES (ppm)	ALKALINITY Pf/Mf	LCM Ib/gal
530	18:30	(PPG) 8.30	26	1/0		0/0	NC NC	40	NC NC	0.0	0	7.5	2,800	0 / 4.4	Bicarbs 5368 m
				1											
	<u></u>		<u></u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u></u>	<u> </u>	<u></u>	<u> </u>			
	124					DA	ILY MUD	COST & I	NVENTOR	Υ					
			BARITE	QUICK GEL	CAUSTIC	LIME	SODA ASH	UNIDRILL	SOLKWICK	1000	PHPA	CEDAR	TRUCKING		TOTAL
1955			5 (5 (5 (5 (5 (5 (5 (5 (5 (5 (MOICK GET	CACSITC	LIME									
			(sx)	(sx)	(sx)	(sx)	(sx)	(ax)	(sx)	PAC-R (sx)	(gal)	(ex.)	(5)		(\$)
COST			(sx)	(s×)	(sx.)	(sx)	(sk)	LITATE FROM			1	1000 1000 1000 100	(5)		
	ENTORY		(sx)	(6×)	(six.)	(sx)	(ax)	LITATE FROM			1	1000 1000 1000 100	(5)		(5)
TING INV	ECEIVED			(ex)	(\$x.)	(ex)	(ex)	LITATE FROM			1	1000 1000 1000 100	(5)		6
TING INV	ECEIVED HOURS			(ex)	(\$x)	(ax)	(ex)	LITATE FROM			1	1000 1000 1000 100	65		
TING INV ITORY R LAST 24 IG INVEN	ECEIVED HOURS TORY			(ex)	(sx.)	(ax)	(ek)	LITATE FROM			1	1000 1000 1000 100	69		
TORY R LAST 24 G INVEX MUD CO OUS CU	ECDIVED HOURS HORY DST MULATIVE COS	T		(ex)	(ax.)	(ex)	(ux)	LITATE FROM			1	1000 1000 1000 100	(5)		
TING INV TORY R LAST 24 IG INVEN MUD CO	ECEIVED HOURS TORY	T		(ex)	(*x*)	(ex)		(ax)	(ax)		1	1000 1000 1000 100	(5)		2
TING INV TORY R LAST 24 G INVEN MUD CO OUS CU LATIVE I	ECEIVED HOURS HOURS FORY DIST MULATIVE COST		120				MUD LC	GGER RI	(ex)	(ex)	1	1000 1000 1000 100	(5)		
TING INV TORY R LAST 24 G INVEN MUD CO OUS CU LATIVE I	ECDIVED HOURS HORY DST MULATIVE COS					(ex)	MUD LC	GGER RI	(ax)	(ex)	1	(ex.)	Price River	2100' Castlega	
TING INV TORY R LAST 24 IG INVEN MUD CO OUS CU LATIVE I	ECEIVED I HOURS ITORY DIST MULATIVE COST MUD COST	Jnits)	120		RATE C	OF PENETRATI	MUD LC	(ax)	EPORT SHOW GAS DA DURING UNITS	(ex)	(gal)	(ex.)	Price River Blackhawk	3420'	ate 3110'
TING INV TORY R LAST 24 IG INVEN MUD CO OUS CU LATIVE I	ECBIVED I HOURS ITORY DIST MULATIVE COST IGAS DATA (in 1) CONN	Jnils) TRIP	SHOWINTED FROM (8) 4016	TO (%) 4021	PATE C BEFORE (t) 4	F PENETRATI DURING (R) .75	MUD LC	GGER RI BEFORE UNTS	EPORT SHOW GAS DA DURING UNITS	TA AFTER UNITS	Formation T	(ex.)	Price River Blackhawk		ite 3110'
TING INVENTION OF THE PROPERTY	ECDIVED HOURS ITORY IST MULATIVE COST WID COST CONN GAS	Jnils) TRIP	120 SHOWINTE FROM (t) 4016 4068	TO (N)	RATE C BEFORE (0)	OF PENETRATI DURING (R)	MUD LC	GGER RI	EPORT SHOW GAS DA DURING UNITS	TA AFTER UNITS	(gal)	(ex.)	Price River Blackhawk	3420'	ite 3110'
ING INV TORY R LAST 24 3 INVE MUD CO DUS CU LATIVE I	ECDIVED HOURS ITORY IST MULATIVE COST WID COST CONN GAS	Jnils) TRIP	\$HOWINTED FROM (I) 4016 4062 4112	TO (N) 4021 4063 4128	RATE C BEFORE (0) 4 4 4 7 6	DUNNS (A) 75 1.2 1	MUD LC ON	GGER RI BEFORE UNTS 10 40 30	EPORT SHOW GAS DA DATE OF THE SHOW GAS DA DATE OF THE SHOW GAS DA DATE OF THE SHOW GAS DA DATE OF THE SHOW GAS DA DATE OF THE SHOW GAS DA DATE OF THE SHOW GAS DA DATE OF THE SHOW GAS DA DATE OF THE SHOW GAS DATE OF THE	(ex.) TA AFTER DNTS 10 20 20 40	Formation T	(ex.)	Price River Blackhawk	3420'	ite 3110'
ING INV TORY R LAST 24 3 INVE MUD CO DUS CU LATIVE I	ECDIVED HOURS ITORY IST MULATIVE COST WID COST CONN GAS	Jnils) TRIP	5+0W INTE FROM (A) 4016 4068 4082	TO (8) 4069 4083	RATE C BEFORE (f) 4 7	DUNNS (N) 1.2	MUD LC ON AFTER (N) 6	GGER RI BEFORE UNITS 10 40	EPORT SHOW GAS DA DUPING UNITS 1850 275 275	TA AFTER UNITS 10 20 20 20	Formation T	(ex.)	Price River Blackhawk	3420'	ite 3110'
ING INV TORY R LAST 24 3 INVE MUD CO DUS CU LATIVE I	ECDIVED HOURS ITORY IST MULATIVE COST WID COST CONN GAS	Jnils) TRIP	\$HOWINTED FROM (I) 4016 4062 4112	TO (N) 4021 4063 4128	RATE C BEFORE (0) 4 4 4 7 6	DUNNS (A) 75 1.2 1	MUD LC ON	BEFORE UNITS 10 40 40 50 50	EPORT SHOW GAS DA DURING UNITS 1850 275 275 1600 465	(ex.) TA AFTER DNTS 10 20 20 40	Formation T	(ex.)	Price River Blackhawk	3420'	ite 3110'
ING INVENTAGE IN	ECEDVED HOURS TORY SIT WILLATIVE COST MILLATIVE COST GAS DATA (In It CONN GAS 30 - 50	TRIP GAS	5:50W INTE FROM (8) 4016 4068 4082 4112 4155	TO (6) 4021 4069 4083 4156	RATE C BEFORE (R) 4 4 7 6 8	DURING (N) .75 .1.2 .1 .1 .3	MUD LC ON AFTER (6) 6 6 7 7 NA	DEFORE UNITS 10 40 40 30 50	EPORT SHOW GAS DA DURING UNITS 1850 275 275 1600 465	AFTER ONTS 10 20 20 40 50	Formation 1 Sample pers	(ex)	Price River Blackhawk 45% Ss, 45°	3420' % Sitst, 10% Co	ate 3110'
ING INVENTORY R AST 242 G INVENTORY R MUD CC LATIVE MULC CK LUND - 50	ECEIVED HOURS ITORY SET MULATIVE COST GAS DATA (in 1) CONN GAS 30 - 50 Deviation	TRIP GAS Azimuth	\$HOWINTED FROM (I) 4016 4062 4112	TO (N) 4021 4069 4083 4126 4156	### PATE C **BEFORE** (f) 4 7 6 8 **Deviation**	PENETRATI DURING (N) 75 1.2 1 1 3	MUD LCON AFTER (N) 6 6 7 7 NA DEVIAT	GGER RIE BEFORE UNITS 10 40 30 50 ION SUP	EPORT SHOW GAS DA DURING LATS 1850 275 1600 465 RVEYS	Arimuth Asimuth	Formation 1 Sample pers	(ex)	Price River Blackhawk 45% Ss., 45°	3420' % Sitst, 10% Co	pl Angle
NG INV ORY R AST 24 I INVENTED INV MUD CC US CU ATIVE I MUD CK UND 50	ECEDVED HOURS TORY SIT WILLATIVE COST MILLATIVE COST GAS DATA (In It CONN GAS 30 - 50	TRIP GAS	5+10W INTE FROM (1) 4016 4088 4082 4112 4155	TO (6) 4021 4069 4083 4156	RATE C BEFORE (R) 4 4 7 6 8	DURING (N) .75 .1.2 .1 .1 .3	MUD LC ON AFTER (6) 6 6 7 7 NA	DEFORE UNITS 10 40 40 30 50	EPORT SHOW GAS DA DURING UNITS 1850 275 275 1600 465	AFTER ONTS 10 20 20 40 50	Formation 1 Sample pers	(ex)	Price River Blackhawk 45% Ss, 45°	3420' % Sitst, 10% Co	ate 3110'
MUD CC MU	ECEIVED HOURS ITORY DIST MULATIVE COST GAS DATA (in 1) CONN GAS 30 - 50 Deviation 1.03 1.22 1.20	Azimuth 194.79 199.51 196.67	120 SHOW INTE FROM (0) 4016 4088 4082 4112 4155 DL Angle 0.18 0.76 0.17	TO (%) 4021 4069 4083 4126 4156	PATE C BEFORE (ft) 4 7 6 8 Deviation 0.89 0.75 0.73	PENETRATI DURING (N) 75 1.2 1 1 3 Azimuth 190.50 201.30	MUD LC ON AFTER (%) 6 6 7 7 NA DEVIAT DL Angle 1,35 0,39 0,47	GGER RI BEFORE UNTS 10 40 30 50 ION SUP Depth 2244 2275 2306	EPORT SHOW GAS DA DURING LATS 1850 275 1600 465 EVEYS Deviation 2,27 2,24 2,06 2,06 2,27 2,24 2,06	Azimuth 147.80 156.70	Formation 1 Sample persons Sample Description 1 DL Angle 0.68 1.11 0.64	(ex) Tops: centages: ription: Depth 3103 3133 3135	Price River Blackhawk 45% Ss., 45°	3420' % Sitst, 10% Co	DL Angle 0.96 0.14 0.42
MUD CC MU	ECEIVED HOURS TORY DIST MULATIVE COST GAS DATA (in the cost) GAS DA	Azimuth 184.79 195 31 186.87 188.91	120 SHOWINTE FROM (N) 4016 4088 4082 4112 4155 DL Angle 0.18 0.76 0.17 0.21	TO (%) 4021 4069 4083 4156 4156 4156 4156	PATE (PEFORE (8) 4 4 7 6 8 8 Deviation 0.69 0.75 0.73	DE PENETRATI OUTING (N) 7.75 1.2 1 1 3 Azimuth 190.80 190.50 201.30 218.50	MUD LC ON ATER (8) 6 7 7 NA DEVIAT DL Angle 1.35 0.39 0.47 0.83	BEFORE UNTS 10 40 40 40 50 ION SUF Depth 2244 2275 2336 2337	EPORT SHOW GAS DA DURING UNITS 1850 275 275 1600 465 EVENT OF THE PROPERTY OF	Aginuth 147.80 156.50 157.60	Formation 1 Sample person Sample Description L Angle 0.65 1.11 0.64 0.13	(ex) Tops: centages: ription: Depth 3103 3133 3165 3196	Price River Blackhawk 45% Ss, 45° 1.08 1.02 1.15 1.28	3420' % Sitst, 10% Co	DL Angle 0.96 0.14 0.42 0.58
MULTING INVENTIGE IN INVENTIGE IN INVENTIGE IN INVENTIGE IN INVENTIGE IN INVENTIGE IN INVENTIGE IN INVENTIGE IN INVENTIGE IN INVENTIGE IN INVENTIGE IN INVENTIGE IN INVENTIGE IN INVENTIGE IN INVENTIGE IN INVENTIGE IN INVE	ECEIVED HOURS TORY DIST MILLATIVE COST GAS DATA (In In In In In In In In In In In In In I	Azimuth 184.79 195 53 166.87 180.49	5:50W INTE FROM (8) 4016 4068 4082 4112 4155 DL Angle 0.19 0.76 0.17 0.21	VAL 70 (N) 4021 4069 4083 4128 4156 Depth 1407 1438 1468 1468 1498 1532	Part (n) (n) 4 7 6 8 Deviation 0.89 0.75 0.73 0.84 0.51	DURING (R) .75 1.2 1 1 1 1.3 3 Azimuth 190.80 190.50 201.30 201.50	MUD LC ON AFTER (K) 6 6 7 7 NA DEVIAT DL Angle 1.35 0.39 0.47 0.43 1.05	DEFONE UNTS 10 40 40 30 50 ION SUI 2244 2275 2308 2337 2367	EPORT SHOW GAS DA DURING UNITS 1850 275 275 1600 465 Peviation 2.27 2.24 2.06 2.05 1.85	Azimuth 147.80 156.50 157.80 163.20	Formation 1 Sample perc Sample Descr 1.11 0.64 0.13 0.73	Depth 3103 3136 3196 3226	Price River Blackhawk 45% Ss, 45° 1.08 1.02 1.15 1.45	3420' % Sitst, 10% Co Azimuth 174.90 175.60 174.00 167.30 169.50	DL Angle 0.96 0.14 0.42 0.58 0.66
MUDICIPAL STORY RESERVED TO ST	ECEIVED HOURS TORY DIST MULATIVE COST GAS DATA (in the cost) GAS DA	Azimuth 184.79 195 31 186.87 188.91	120 SHOWINTE FROM (N) 4016 4088 4082 4112 4155 DL Angle 0.18 0.76 0.17 0.21	TO (%) 4021 4069 4083 4156 4156 4156 4156	PATE (PEFORE (8) 4 4 7 6 8 8 Deviation 0.69 0.75 0.73	DE PENETRATI OUTING (N) 7.75 1.2 1 1 3 Azimuth 190.80 190.50 201.30 218.50	MUD LC ON ATER (8) 6 7 7 NA DEVIAT DL Angle 1.35 0.39 0.47 0.83	BEFORE UNTS 10 40 40 40 50 ION SUF Depth 2244 2275 2336 2337	EPORT SHOW GAS DA DURING UNITS 1850 275 275 1600 465 EVENT OF THE PROPERTY OF	Aginuth 147.80 156.50 157.60	Formation 1 Sample person Sample Description L Angle 0.65 1.11 0.64 0.13	(ex) Tops: centages: ription: Depth 3103 3133 3165 3196	Price River Blackhawk 45% Ss, 45° 1.08 1.02 1.15 1.28	3420' % Sitst, 10% Co	DL Angle 0.96 0.14 0.42 0.58
MUC CK WIND State State MUC CK WIND State MUC CK	Deviation 1.03 1.22 1.20 1.34 1.28 1.34 1.32	Azimuth. 184.79 195.3 166.67 180.09 175.88	120 S16W INTE FROM (A) 4016 4098 4082 4112 4155 DL Angle 0.19 0.76 0.17 0.21 0.68 0.28 0.36	VAL TO (N) 4021 4069 4083 4156 Depth 1407 1438 1468 1468 1469 1532 1563 1595 1626	PATE (6) (8) 4 4 7 6 8 8 0.48 0.75 0.73 0.84 0.51 0.83 0.85 0.81	DF PENETRATI DURING (N) .75 1.2 1 1 1 1 190.80 190.50 201.30 211.50 206.70 194.00 187.20	MUD LC ON AFTER (K) 6 6 7 7 NA DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43	DOGGER RI DEFORE UNTS 10 40 40 40 2244 2275 2308 2337 2367 2399 2429 2450	EPORT SHOW GAS DA OUTING UNITS 1850 275 275 1600 465 EVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.98	Azimuth 147.80 156.50 157.70 163.20 170.70 171.70	(gel)	Depth: 3103 3133 3165 3226 3257 3285 3320	Price River Blackhawk 45% Ss, 45° 1.02 1.15 1.28 1.45 1.38 1.40	3420' % Sitst, 10% Co Azimuth 174.90 175.60 174.00 167.30 168.50 155.50 155.00	DL Angle 0.96 0.14 0.42 0.53 0.66 0.40 0.82 0.31
MUD CON MUD CO	ECEIVED HOURS ITORY SET MILLATIVE COS* MILLATIVE COS* MILLATIVE COS* GAS DATA (n 1 CONN GAS 1 CONN	Azimuth 184.79 185.81 186.87 185.91 180.29 175.88 164.40 162.92	120 SHOW INTE FROM (4) 4016 4016 4088 4082 4112 4155 DL Angle 0.18 0.76 0.17 0.21 0.68 0.26 0.36 0.39 0.12	TO (%) 4021 4069 4083 4126 4156 Depth 1407 1408 1499 1532 1563 1595 1626 1657	Parte (9) 4 4 7 6 8 8 Deviation 0.89 0.75 0.73 0.84 0.51 0.81 1.20	PENETRATI DURING (R) 75 1.2 1 1 1 1 190.80 190.80 201.30 211.50 206.70 194.00 187.20 198.70 202.10	MUD LC ON AFTER (6) 6 6 7 7 7 NA DEVIAT DL Angle 1.35 0.39 0.47 0.63 1.13 0.29 0.43 1.29	GGER RI BEFORE UNTS 10 40 40 30 50 ION SUP 2244 2275 2306 2337 2367 2369 2429 2480 2492	EPORT SHOW GAS DA DUNING LATS 1850 275 1600 465 EVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.44 1.22 0.96 0.96	Azimuth 10 20 40 50 155.00 155.70 157.80 163.20 170.70 171.70	(gel)	Depth 3103 3165 3196 3226 3257 3288 3320 3350	Price River Blackhawk 45% Ss, 45° Deviation 1.02 1.15 1.25 1.45 1.40 1.40 1.36	Azimuth 174.90 175.00 176.50 175.00 165.50 155.00 152.50	DL Angle 0.96 0.14 0.42 0.55 0.66 0.40 0.82 0.31 0.54
MUCCK MU	ECEIVED HOURS 1/ORY 1/OR	Azimuth 184.79 189.57 180.91 180.49 180.29 175.88 164.40 162.92 175.88	120 SHOWINTE FROM (4) 4016 4088 4082 4112 4155 DL Angle 0.18 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.68	TO (%) 4021 4069 4083 4156 4156 4156 4156 1532 1563 1595 1626 1657 1658	PATE C PEFORE (8) (4) 4 4 7 6 6 8 Deviation 0.69 0.75 0.75 0.81 0.83 0.85 0.81 1.20 1.00	Azimuth 190.80 190.50 201.30 201.30 215.50 206.70 194.00 195.70 202.10 202.10	MUD LC ON After (6) 6 7 7 NA DEVIAT DLAngle 1.35 0.39 0.47 1.08 1.13 0.29 0.43 1.29 0.65	BEFORE UNTS 10 40 40 40 50 ION SUF 2244 2275 2398 2337 2367 2367 2399 2429 2480 2492 2492	EPORT SHOW GAS DA DUUMS UNTS 1850 465 275 275 275 275 275 275 1500 465 205 1.95 1.95 1.48 1.22 0.96 0.96 0.91	TA AFFER CHTS 10 20 20 155.50 157.60 163.20 170.70 171.70 171.90 171.90 171.90 171.90 171.90 171.90 171.90 171.90	(gel)	Depth 3103 3133 3165 3296 3226 3257 3288 3320 3350 3381	Deviation 1.08 1.02 1.15 1.28 1.45 1.38 1.40 1.40 1.140 1.15	Azimuth 174.90 175.60 175.00 167.30 155.00 155.00 154.50 154.50	DLAngle 0.96 0.14 0.42 0.42 0.43 0.66 0.40 0.82 0.31 0.54 0.79
MUCCK UND 13 13 13 13 13 13 13 13 13 13 13 13 13	ECEIVED HOURS ITORY SET MILLATIVE COS* MILLATIVE COS* MILLO COST Deviation 1.03 1.22 1.20 1.25 1.34 1.34 1.33	Azimuth 184.79 185.81 186.87 185.91 180.29 175.88 164.40 162.92	120 SHOW INTE FROM (4) 4016 4016 4088 4082 4112 4155 DL Angle 0.18 0.76 0.17 0.21 0.68 0.26 0.36 0.39 0.12	TO (%) 4021 4069 4083 4126 4156 Depth 1407 1408 1499 1532 1563 1595 1626 1657	Parte (9) 4 4 7 6 8 8 Deviation 0.89 0.75 0.73 0.84 0.51 0.81 1.20	PENETRATI DURING (R) 75 1.2 1 1 1 1 190.80 190.80 201.30 211.50 206.70 194.00 187.20 198.70 202.10	MUD LC ON AFTER (6) 6 6 7 7 7 NA DEVIAT DL Angle 1.35 0.39 0.47 0.63 1.13 0.29 0.43 1.29	GGER RI BEFORE UNTS 10 40 40 30 50 ION SUP 2244 2275 2306 2337 2367 2369 2429 2480 2492	EPORT SHOW GAS DA DUNING LATS 1850 275 1600 465 EVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.44 1.22 0.96 0.96	Azimuth 10 20 40 50 155.00 155.70 157.80 163.20 170.70 171.70	(gel)	Depth 3103 3165 3196 3226 3257 3288 3320 3350	Price River Blackhawk 45% Ss, 45° Deviation 1.02 1.15 1.25 1.45 1.40 1.40 1.36	Azimuth 174.90 175.00 176.50 175.00 165.50 155.00 152.50	DL Angle 0.96 0.14 0.42 0.53 0.66 0.40 0.82 0.31 0.54
ING INV. TORY R ALAST 24 MUD CC OULS GU ATIVE I MUU CC OULS GU ATIVE I AT	CONT CONT	Azimuth 184.79 189.53 186.91 180.49 175.88 164.40 162.92 175.88 143.19 137.03 137.05 130.59	120 SHOWINTE FROM (N) 4016 4088 4082 4112 4155 DL Angle 0.18 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51	TVAL TO (%) 4021 4069 4083 4126 4156 Depth 1407 1438 14489 1532 1563 1595 1626 1657 1658 1720 1751 1782	PATE C PEFORE (8) 4 4 7 6 8 8 0.89 0.75 0.84 0.51 0.81 1.20 1.00 0.88 0.84 0.93	Azimuth 190.80 190.50 201.30 201.30 215.00 205.70 194.00 197.20 196.70 202.10 202.10 197.00 157.60	MUD LC ON After (6) 6 6 7 7 NA DEVIAT DL Angle 1.35 0.39 0.47 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 0.43	GGER RI BEFORE UNTS 10 40 40 30 50 ION SUR 2244 2275 2399 2429 2480 2492 2492 2523 2553 2584 2614	EPORT SHOW GAS DA DUUMS UNTS 1850 465 275 275 275 275 275 1500 465 205 1.95 1.95 1.48 1.22 0.96 0.96 0.91 1.23 1.10 1.30	Azimuth 147.80 155.90 157.80 163.20 171.20 171.20 171.20 172.60 163.70 163.70 163.70 163.70	(gel)	Depth 3103 3133 3165 3196 3226 3320 3350 3381 3413 3472	Deviation 1.08 1.02 1.15 1.28 1.40 1.40 1.19 1.19 1.19 1.10 1.10 1.10 1.10 1.1	3420' % Sitst, 10% Co Azimuth 174.90 175.60 174.00 167.30 169.60 155.50 159.00 152.50 154.50 159.80	DL Angle 0.96 0.14 0.42 0.53 0.66 0.40 0.82 0.31 0.54 0.79 0.33
MUCCOLOR STATE STA	Deviation 1.03 1.22 1.26 1.34 1.33 1.43 1.43 0.84 0.71 0.86 0.	Azimuth 184.79 1953 166.87 180.49 180.29 175.88 164.40 162.92 143.19 137.03 130.59 137.08 130.19 137.08 130.59 137.08	120 SHOWINTED FROM (N) 4016 4068 4082 4112 4155 DL Angle 0.18 0.76 0.17 0.21 0.68 0.25 0.36 0.89 0.12 0.68 1.29 1.88 0.51 0.95	NAL TO (%) 4021 4069 4083 4116 4156 Depth 1407 1438 1468 1469 1532 1563 1595 1626 1657 1688 1720 1751 1782 1813	Payer (N) 4 4 7 6 8 Deviation 0.69 0.75 0.73 0.83 0.84 0.51 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12	Azimuth 190.80 190.50 201.30 218.50 208.70 194.00 197.20 198.70 202.10 202.10 197.60 164.00	MUD LC ON AFTER (%) 6 6 7 7 7 NA DEVIAT DLAngle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.43 1.29 0.85 1.23 1.04 0.43 1.06	BEFORE UNTS 10 40 40 40 40 2244 2275 2307 2367 2397 2460 2492 2452 2523 2553 2584 2614	EPORT SHOW GAS DA DUPING UNITS 1850 275 275 1600 465 EVENT 1850 2.27 2.24 2.06 1.95 1.44 1.22 0.96 0.98 0.99 1.123 1.10 1.30 1.60	Agriculth 147.80 156.50 157.70 177.80 157.40	(gal)	Depth 3103 3133 3165 3226 3257 3288 3320 3350 3381 3413 3443 3472 3503	Deviation 1.08 1.02 1.15 1.38 1.40 1.40 1.109 1.16 1.109 1.16 1.109 1.16 1.109 1.109 1.109	Azimuth 174.90 175.60 174.00 167.30 169.50 155.00 152.50 154.50 159.80 169.80	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.81 0.54 0.79 0.79 0.73 0.23
ING INV. TORY R AND TABLE A INVESTIGATION MUD CC CK UND - 50 - 50 - 50 - 77 - 78	Deviation 1.03 1.22 1.20 1.25 1.32 1.43 1.43 1.43 1.44 1.45 1.	Azimuth 164.79 180.29 175.88 164.40 162.92 156.82 143.19 137.08 130.59 112.85	5:50WINTE FROM (a) 4016 4016 4088 4082 4112 4155 DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.36 0.36 0.51 1.29 1.88 0.51	TO (N) 4021 4069 4083 4126 4156 1407 1438 1468 11592 1562 1657 1658 1720 1751 1782 1813 1844	Payetton (8) 4 4 7 6 8 8 0.89 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05	PF PENETRATI DURING (R) .75 1.2 1 1.3 3 .90.80 190.80 190.50 201.30 218.50 208.70 194.00 197.70 202.10 202.10 202.10 197.80 194.00 157.80 149.00 157.80	MUD LC ON AFTER (6) 6 6 7 7 NA DE VIAT DL Angle 1.35 0.39 0.47 0.63 1.108 1.13 0.29 0.65 1.23 1.04 0.43 1.06 0.59	GGER RI BEFORE UNTS 10 40 30 50 ION SUP 2244 2245 2306 2337 2367 2369 2429 2480 2492 2523 2534 2614 2614 2672	EPORT SHOW GAS DA DURING LINES 1850 275 1500 465 EVEYS Deviation 2.27 2.24 2.06 2.05 1.45 1.95 1.40 1.22 0.96 0.99 1.23 1.10 1.30 1.60 1.58	Azimuth 10 20 40 50 155.50 156.70 170.10 171.90 171.20 170.60 163.20 170.70 171.90 175.40 165.40	Gel	Depth 3103 3133 3165 3226 3257 3288 3320 3350 3341 3443 3447 3503 3598	Deviation 1.08 1.02 1.15 1.28 1.45 1.38 1.40 1.36 1.12 1.16 1.34 1.50 2.00	Azimuth 174.90 175.60 174.00 167.30 169.50 155.00 152.50 154.50 159.80 169.80	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.81 0.54 0.79 0.79 0.73 0.23
ING INV. TORY RALAST EXAMPLE TO THE PROPERTY OF THE PROPERTY O	Deviation 1.03 1.22 1.26 1.34 1.33 1.43 1.43 0.84 0.71 0.86 0.	Azimuth 184.79 1953 166.87 180.49 180.29 175.88 164.40 162.92 143.19 137.03 130.59 137.08 130.19 137.08 130.59 137.08	120 SHOWINTED FROM (N) 4016 4068 4082 4112 4155 DL Angle 0.18 0.76 0.17 0.21 0.68 0.25 0.36 0.89 0.12 0.68 1.29 1.88 0.51 0.95	NAL TO (%) 4021 4069 4083 4116 4156 Depth 1407 1438 1468 1469 1532 1563 1595 1626 1657 1688 1720 1751 1782 1813	PATE C PETORE (8) 4 4 7 6 8 8 Deviation 0.89 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.18	Azimuth 190.80 190.50 201.30 201.30 218.50 200.70 194.00 187.20 196.70 202.10 202.10 179.00 140.00 140.00 140.00	MUD LC ON After (8) 6 6 7 7 NA DEVIAT DL Angle 1.35 0.39 0.47 0.43 1.108 1.129 0.43 1.29 0.65 1.23 1.04 0.43 1.06 0.59 0.63	GGER RI BEFONE UNTS 10 40 40 30 50 ION SUI Depth 2244 2276 2337 2367 2399 2429 2480 2492 2523 2553 2553 2553 2554 2614 2644 2672 2703	EPORT SHOW GAS DA DURING UNITS 1850 275 1600 465 275 1600 465 275 1600 1600 1600 1600 1600 1600 1600 160	Azimuth 147.80 155.50 157.80 163.20 170.70 171.20 171.20 175.40 163.70 163.70 163.70 163.70 163.70	(gel)	Depth 3103 3133 3165 3196 3226 3320 3381 3413 3442 3503 3598	Deviation 1.06 1.02 1.15 1.28 1.40 1.40 1.40 1.30 1.12 1.09 1.15 1.28 1.40 1.40 1.40 1.40 1.40 1.40 1.40 1.40	Azimuth 174.90 175.60 174.00 167.30 169.50 155.00 152.50 154.50 159.80 169.80	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.81 0.54 0.79 0.79 0.73 0.23
ING INV. TORY R A. AST 24 AST 25 AST 27 AST 27 AST 27 AST 27 AST 27 AST 27 AST 27 AST 27 AST 27 AST 25 AST 27 AST 25 AS	CONT CONT	Azimuth 184.79 180.59 180.59 175.88 164.40 162.92 156.82 143.19 137.03 130.59 112.85 107.94 109.50	5:50W INTE FROM (a) 4016 4016 4068 4082 4112 41155 DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.39 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.65	VAL TO (%) 4021 4069 4083 4126 4156 Depth 1407 1438 1468 1499 1532 1595 1626 1750 1688 1770 1781 1813 1844	Payetton (8) 4 4 7 6 8 8 0.89 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05	PF PENETRATI DURING (R) .75 1.2 1 1.3 3 .90.80 190.80 190.50 201.30 218.50 208.70 194.00 197.70 202.10 202.10 202.10 197.80 194.00 157.80 149.00 157.80	MUD LC ON AFTER (6) 6 6 7 7 NA DE VIAT DL Angle 1.35 0.39 0.47 0.63 1.108 1.13 0.29 0.65 1.23 1.04 0.43 1.06 0.59	GGER RI BEFORE UNTS 10 40 30 50 ION SUP 2244 2245 2306 2337 2367 2369 2429 2480 2492 2523 2534 2614 2614 2672	EPORT SHOW GAS DA DURING LINES 1850 275 1500 465 EVEYS Deviation 2.27 2.24 2.06 2.05 1.45 1.95 1.40 1.22 0.96 0.99 1.23 1.10 1.30 1.60 1.58	Azimuth 10 20 40 50 155.50 156.70 170.10 171.90 171.20 170.60 163.20 170.70 171.90 175.40 165.40	Gel	Depth 3103 3133 3165 3226 3257 3288 3320 3350 3341 3443 3447 3503 3598	Deviation 1.08 1.02 1.15 1.28 1.45 1.38 1.40 1.36 1.12 1.16 1.34 1.50 2.00	Azimuth 174.90 175.60 174.00 167.30 169.50 155.00 152.50 154.50 159.80 169.80	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.81 0.54 0.79 0.79 0.73 0.23
MULION CONTROL OF THE	CONT CONT	Azimuth 184.79 189.53 186.87 185.99 180.29 175.88 164.40 162.92 156.82 143.19 137.03 130.59 112.85 107.94 109.50 120.10 126.70	120 SHOWINTE FROM (4) 4016 4068 4002 4112 4155 DL Angle 0.18 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.655 0.62 0.40	VAL TO (%) 4021 4069 4083 4126 4156 Depth 1407 1438 1468 1499 1532 1595 1626 1750 1688 1770 1781 1813 1844 1875 1906 1936	PATE C PETORE (8) 4 4 7 6 8 8 Deviation 0.89 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.93 1.12 1.05 1.18 1.30 1.75 1.70	Azimuth 190.80 180.50 201.30 218.50 202.10 187.20 186.70 202.10 202.10 179.00 164.00 149.00 158.00 165.00 165.00	MUD LC ON After (8) 6 6 7 7 NA DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 0.43 1.06 0.59 0.43 1.06 0.59 0.63 0.54 1.59 0.65	GGER RI BEFONE UNTS 10 40 40 40 30 50 ION SUI Depth 2244 2275 2399 2429 2480 2492 2523 2553 2553 2554 2614 2644 2672 2703 2734 2764 2826	EPORT SHOW GAS DA DURING LATE 1850 275 1600 465 275 1600 465 275 1600 1600 1600 1600 1600 1600 1600 160	Azimuth 147.80 155.0 155.7 157.80 163.20 170.70 171.90 171.90 171.90 171.90 171.90 171.90 171.70 177.90 177.90 177.90 177.90 177.90 177.90 177.90 177.90 184.00	Gel Formation T	Depth 3103 3103 3105 3196 3226 3257 3285 3320 3350 3365 33443 3447 3508 3666 3748 3810 3902	Deviation 1.06 1.02 1.15 1.28 1.40 1.40 1.30 1.12 1.09 1.15 1.28 1.40 1.40 1.30 1.20 1.30 1.30 1.30 1.30 1.30 1.30 1.30 1.3	Azimuth 174.90 175.60 174.00 167.30 169.50 155.00 152.50 154.50 159.80 169.80	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.81 0.54 0.79 0.793 0.23
ING INV TORY R 40 3 INV D 50 3 INV D 50 3 INV D 50 3 INV D 50 50 50 50 50 50 50 50 50 50 50 50 50 5	Deviation 1.03 1.22 1.24 1.25 1.34 1.43 1.43 1.43 1.43 1.00 1.	Azimuth 184.79 1953 166.87 180.91 175.88 164.40 162.92 143.19 137.08 130.59 172.85 107.94 109.50 122.57 137.30	120 SHOWINTEL FROM (N) 4016 4068 4062 4112 4155 DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.89 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.65 0.65 0.62 0.40 0.33	Depth 1407 1438 1468 1532 1563 1595 1626 1657 1638 1720 1751 1752 1813 1844 1875 1996 1935 1997	Payer (N) (A) (A) (A) (A) (A) (A) (A) (A) (A) (A	Azimuth 190.80 190.50 201.30 211.50 208.70 194.00 197.20 197.20 198.70 202.10 202.10 179.00 149.00 149.00 149.00 149.00 155.00 146.50 156.00 156.00	MUD LC ON AFTER (II) 6 6 7 7 7 NA DEVIAT DLAngle 1.35 0.39 0.47 0.83 1.08 1.13 1.29 0.43 1.23 1.04 0.43 1.29 0.65 1.23 1.04 0.43 1.06 0.59 0.83 0.54 1.59 0.50 0.39	BEFORE UNTS 10 40 40 30 50 ION SUF 2244 2275 2367 2397 2367 2397 2480 2492 2480 2492 2523 2553 2584 2614 2672 2703 2734 2764 2826 2856	EPORT SHOW GAS DA DURING UNITS 1850 275 275 275 275 275 275 275 275 275 275	Asimuth 147.80 156.50 157.60 163.20 170.70 171.90 171.90 175.40 165.70 168.10 177.10 177.10 177.10 177.10 178.90 184.00	(gel)	Depth 3103 3133 3163 3226 3257 3288 3320 3350 3381 3413 3442 3503 3598 3686 3744 3810 3992	Deviation 1.08 1.02 1.15 1.36 1.45 1.36 1.40 1.40 1.40 1.50 2.00 2.25 2.50 3.00 3.00 3.75	Azimuth 174.90 175.60 174.00 167.30 169.50 155.00 152.50 154.50 159.80 169.80	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.81 0.54 0.79 0.793 0.23
MUCCHANGE INVESTIGATION IN THE	CAN CAN	Azimuth 164.79 180.29 175.88 164.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.70 132.57 137.30	120 SHOWINTE FROM (4) 4016 4068 4002 4112 4155 DL Angle 0.18 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.655 0.62 0.40	VAL TO (N) 4021 4069 4083 4128 4156 Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1638 1720 1751 1782 1813 1844 1875 1908 1935 1967 1997 2028	Payletion (N) 4 4 7 6 8 8 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.18 1.30 1.75 1.70 1.61 1.91	DEPENDENTAN DURING (R) .75 1.2 1 1.3 3 .75 1.90.80 190.50 201.30 218.50 206.70 194.00 187.20 195.70 202.10 202.10 202.10 157.80 164.00 158.00 148.50 158.00 156.00 156.00 158.40 158.40	MUD LC ON AFTER (K) 6 6 7 7 7 NA DEVIAT DLAngle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.65 1.23 1.04 0.43 1.09 0.63 0.59 0.83 0.54 1.59 0.50 0.39	GGER RI BEFORE UNTS 10 40 30 50 ION SUP 2244 2245 2306 2337 2367 2369 2449 2452 2553 2554 2614 2672 2703 2734 2674 2672 2703 2734 2764 2858 2857	EPORT SHOW GAS DA DURING UNITS 1850 275 1500 465 205 1500 1500 1500 1500 1500 1500 1500	Azimuth 10 20 40 50 155.50 156.50 170.70 171.90 171.20 170.60 163.70 165.10 165.10 177.10 177.40 165.40	Gel Formation 1	Depth 3103 3103 3105 3196 3226 3257 3285 3320 3350 3365 33443 3447 3508 3666 3748 3810 3902	Deviation 1.06 1.02 1.15 1.28 1.40 1.40 1.30 1.12 1.09 1.15 1.28 1.40 1.40 1.30 1.20 1.30 1.30 1.30 1.30 1.30 1.30 1.30 1.3	Azimuth 174.90 175.60 174.00 167.30 169.50 155.00 152.50 154.50 159.80 169.80	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.81 0.54 0.79 0.79 0.73 0.23
THIS INVENTION OF THE PROPERTY	Deviation 1.03 1.22 1.24 1.25 1.34 1.43 1.43 1.43 1.43 1.00 1.	Azimuth 184.79 1953 166.87 180.91 175.88 164.40 162.92 143.19 137.08 130.59 172.85 107.94 109.50 122.57 137.30	5:50WNTE FROM (8) 4016 4098 4082 4112 41155 DL Angle 0.19 0.76 0.17 0.21 0.88 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.65 0.62 0.40 0.53 0.62	Depth 1407 1438 1468 1532 1563 1595 1626 1657 1638 1720 1751 1752 1813 1844 1875 1996 1935 1997	Payer (N) (A) (A) (A) (A) (A) (A) (A) (A) (A) (A	Azimuth 190.80 190.50 201.30 211.50 208.70 194.00 197.20 197.20 198.70 202.10 202.10 179.00 149.00 149.00 149.00 149.00 155.00 146.50 156.00 156.00	MUD LC ON AFTER (II) 6 6 7 7 7 NA DEVIAT DLAngle 1.35 0.39 0.47 0.83 1.08 1.13 1.29 0.43 1.23 1.04 0.43 1.29 0.65 1.23 1.04 0.43 1.06 0.59 0.83 0.54 1.59 0.50 0.39	BEFORE UNTS 10 40 40 30 50 ION SUF 2244 2275 2367 2397 2367 2397 2480 2492 2480 2492 2523 2553 2584 2614 2672 2703 2734 2764 2826 2856	EPORT SHOW GAS DA DURING UNITS 1850 275 275 275 275 275 275 275 275 275 275	Asimuth 147.80 156.50 157.60 163.20 170.70 171.90 171.90 175.40 165.70 168.10 177.10 177.10 177.10 177.10 178.90 184.00	(gel)	Depth 3103 3133 3163 3226 3257 3288 3320 3350 3381 3413 3442 3503 3598 3686 3744 3810 3992	Deviation 1.08 1.02 1.15 1.36 1.45 1.36 1.40 1.40 1.40 1.50 2.00 2.25 2.50 3.00 3.00 3.75	Azimuth 174.90 175.60 174.00 167.30 169.50 155.00 152.50 154.50 159.80 169.80	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.81 0.54 0.79 0.79 0.73 0.23
MUC INV INV INV INV INV INV INV INV INV INV	Control Cont	Azimuth 104.79 180.91 180.99 175.88 164.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75	120 S:SWINTE FROM (A) 4016 4098 4082 4112 41155 DL Angle 0.19 0.76 0.17 0.21 0.85 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.62 1.48 2.30 0.51	VAL TO (N) 4021 4069 4083 4156 1407 1438 1468 1499 1532 1563 1593 1593 1751 1782 1813 1844 1875 1996 1935 1967 1997 2028 2060 2091 2012	PATE (N) 4 4 7 6 8 8 Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.18 1.30 1.75 1.76 1.76 1.79 1.81 1.91 1.88 1.95 1.74	DF PENETRATI DURING (R) -75 -1.2 -1 -1 -1 -3 -3	MUD LC ON AFTER (6) 6 6 7 7 7 NA DLAngle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.65 1.23 1.04 0.43 1.29 0.65 1.23 1.06 0.59 0.63 0.54 1.59 0.50 0.39 0.51 1.59 0.50 0.39 0.112 1.05 0.28	GGER RI BEFORE UN13 10 40 30 50 ION SUI Depth 2244 2245 2306 2337 2399 2429 2480 2492 2523 2584 2614 2672 2703 2734 2614 2672 2703 2734 2764 2858 2857 2919	EPORT SHOW GAS DA DURING UNITS 1850 275 1500 465 205 1500 1500 1500 1500 1500 1500 1500	Azimuth 147.80 155.50 155.50 155.50 157.60 163.20 170.70 171.90 171.20 170.60 163.70 165.40 163.70 165.10 177.10 177.40 178.90 179.10 177.90 179.90 189.10 191.00 205.80 221.40	Gel Formation 1	Depth 3103 3133 3163 3226 3257 3288 3320 3350 3381 3413 3442 3503 3598 3686 3744 3810 3992	Deviation 1.08 1.02 1.15 1.36 1.45 1.36 1.40 1.40 1.40 1.50 2.00 2.25 2.50 3.00 3.00 3.75	Azimuth 174.90 175.60 174.00 167.30 169.50 155.00 152.50 154.50 159.80 169.80	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.81 0.54 0.79 0.79 0.73 0.23
TORY R 10 10 10 10 10 10 10 10 10 10 10 10 10	CONT CONT	Azimuth 184.79 180.89 180.89 180.29 175.88 164.40 182.92 195.82 143.19 137.03 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 225.75 203.90	120 SHOWINTE FROM (4) 4016 4088 4082 4112 4155 DL. Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.68 1.29 0.68 1.29 0.69 1.18 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.62 1.44 0.30 0.51	VAL TO (%) 4021 4069 4083 4126 4156 Depth 1407 1438 1468 1499 1532 1595 1626 1750 1688 1770 1781 1782 1813 1844 1875 1908 1935 1967 1997 2028 2060 2091 2120 2152	PATE C PEFORE (8) 4 4 7 6 8 8 Deviation 0.89 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.18 1.30 1.75 1.70 1.61 1.91 1.88 1.95 1.74 1.99	Azimuth 190.80 190.50 201.30 218.50 200.70 194.00 187.20 196.70 202.10 202.10 179.00 155.00 164.00 149.00 155.00 156.00 156.00 156.00 156.00 156.00 156.00 156.00 156.00 156.00 156.00 156.00 156.00 156.00 156.00 156.00 156.00	MUD LC ON After (8) 6 6 7 7 NA DEVIAT DL Angle 1.35 0.39 0.47 0.43 1.08 1.13 0.29 0.43 1.09 0.43 1.09 0.43 1.09 0.43 1.09 0.43 1.09 0.43 1.09 0.43 1.09 0.43 1.09 0.43 1.09 0.55 1.23 0.59 0.43 1.09 0.59 1.29 0.65 1.23 0.65 1.23 0.66	GGER RI BEFORE UNTS 10 40 40 40 40 2276 2398 2337 2367 2399 2429 2450 2492 2523 2553 2553 2554 2614 2644 2672 2703 2734 2764 2826 2855 2855 2855 2855 2855 2855 2855	EPORT SHOW GAS DA DURING LATE 1850 275 1600 465 275 1600 465 275 1600 465 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Azimuth 147.80 155.50 155.70 177.70 171.00 171.70 171.90 171.90 171.70 171.90 171.70 171.90 171.70 171.90 171.70 171.90 171.70 170.70 1	Gel Formation T	Depth 3103 3133 3163 3226 3257 3288 3320 3350 3381 3413 3442 3503 3598 3686 3744 3810 3992	Deviation 1.08 1.02 1.15 1.36 1.45 1.36 1.40 1.40 1.40 1.50 2.00 2.25 2.50 3.00 3.00 3.75	Azimuth 174.90 175.60 174.00 167.30 169.50 155.00 152.50 154.50 159.80 169.80	DL Angle 0.96 0.14 0.42 0.53 0.66 0.40 0.51 0.54 0.79 0.33 0.23
MUC INV INV INV INV INV INV INV INV INV INV	Control Cont	Azimuth 104.79 180.91 180.99 175.88 164.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75	120 S:SWINTE FROM (A) 4016 4098 4082 4112 41155 DL Angle 0.19 0.76 0.17 0.21 0.85 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.62 1.48 2.30 0.51	VAL TO (N) 4021 4069 4083 4156 1407 1438 1468 1499 1532 1563 1593 1593 1751 1782 1813 1844 1875 1996 1935 1967 1997 2028 2060 2091 2012	PATE (N) 4 4 7 6 8 8 Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.18 1.30 1.75 1.76 1.76 1.79 1.81 1.91 1.88 1.95 1.74	DF PENETRATI DURING (R) -75 -1.2 -1 -1 -1 -3 -3	MUD LC ON AFTER (6) 6 6 7 7 7 NA DLAngle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.65 1.23 1.04 0.43 1.29 0.65 1.23 1.06 0.59 0.63 0.54 1.59 0.50 0.39 0.51 1.59 0.50 0.39 0.112 1.05 0.28	GGER RI BEFORE UN13 10 40 30 50 ION SUI Depth 2244 2245 2306 2337 2399 2429 2480 2492 2523 2584 2614 2672 2703 2734 2614 2672 2703 2734 2764 2858 2857 2919	EPORT SHOW GAS DA DURING UNITS 1850 275 1500 465 205 1500 1500 1500 1500 1500 1500 1500	Azimuth 147.80 155.50 155.50 155.50 157.60 163.20 170.70 171.90 171.20 170.60 163.70 165.40 163.70 165.10 177.10 177.40 178.90 179.10 177.90 179.90 189.10 191.00 205.80 221.40	Gel Formation 1	Depth 3103 3133 3163 3226 3257 3288 3320 3350 3381 3413 3442 3503 3598 3686 3744 3810 3992	Deviation 1.08 1.02 1.15 1.36 1.45 1.36 1.40 1.40 1.40 1.50 2.00 2.25 2.50 3.00 3.00 3.75	Azimuth 174.90 175.60 174.00 167.30 169.50 155.00 152.50 154.50 159.80 169.80	DL Angle 0.96 0.14 0.42 0.53 0.66 0.40 0.51 0.54 0.79 0.33 0.23

						Р	UMP & C	RCULAT	<u>ng data</u>	<u>.</u>					
		ĺ	LINER	STROKE	ASSUMED	PUMP		PUMP		CIRC	ULATING DETA	LS		ANNULAR VE	LOCITY
MUD			SIZE	LENGTH	EFF	RATE	VC	LUMETRIC DA	TA	Standpipe	Motor	HHP	DP	DC	
PUMPS	MAKE	MODEL	(in)	(in)	(%)	(spm)	(bbls/stk)	(bbls/min)	(gal/min)	(psi)	Differential	(Sq In)	(fl/min)	(ft/min)	1
NO. 1	National	7P50	6.25	7.75	95.00%	90	0.0736	6.29	264	1,210	no MM	3.09	155	327	
NO. 2															
NO.3															,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
COMBINED															

WELLNAME		
Jensen 1-18 43-0	09-30	218
LOCATION DATA		
NW NW Sec 16 T-12S,	R-10E	
1260 FOOTAGES	GL	KB
550' FNL 500' FWL	7569	7580

L RGREEN OPERATING, INC. DAILY DRILLING REPORT

RIG CONTACT IN	FORMATION:
OFFICE TRAILER / FAX:	970 942 7543
CONSULTANT HAND CELL:	303 913 1054
DOGHOUSE:	307 258 7315
DIICUEB.	

DATE SPUD DATE	6AM DEPTH
9/7/20044 8/16/2004	4230
REPORT NO.	24 HR FOOTAGE
22	74
DRLG CONTRACTOR	DAYS SINCE SPUD
Elenburg, Rig 12	22
CONSULTANT	AFE# API#
John C. Lamb	43-007-30718

ACTIVITY AT REPORT TIME:	DAILY COST		CUMICOST		AFE COSTS	
	\$	40,905	\$	693,898	\$	-

CH	IRONOLOG	Y OF DAIL	Y OPERATIONS (06:00 - 06:00 HRS)	SLOW	PUMP RA	TE DATA:		STRIN	IG WEIGHT INFO	ORMATION:	.1
FROM	то	HOURS		Depth	SPM	Pressure	Eff BHA WI	Rotating:	Slackoff:	Hoisting:	
(hrs)	(hrs)	(hrs)	Activity:					93,000	93,000	94,000	
06 00	08:00	2.00	Change pipe rams from 4 1/2" to 5"	•							
08:00	09:00	1.00	PU core barrel and adjust bearings								
09:00	10:30	1.50	Test BOPE to 2000# - held OK								
10:30	15:45	5.25	Trip in hole picking up 5" drill pipe								
15:45	16:00	0.25	Circulate and clean off bottom, drop barrel								
16:00	16:30	0.50	Cut core #1 4156 - 4169, did not have good break after	barrel jamn	ned						
17:30	18:00	0.50	Retrieve core barrel, recovered 6.2' of 13', drop barrel								
18:00	18:30	0.50	Cut core #2 4169 - 4173								
18:30	19:30	1.00	Retrieve core barrel, recovered 1.7' of 4', drop barrel								
19:30	20:30	1.00	Cut core #3 4173 - 4184								
20:30	21:15	0.75	Retrieve core barrel, recovered 6.8' of 11', drop barrel								
21:15	22:45	1,50	Cut core #4 4184 - 4196								
22:45	23:45	1.00	Retrieve core barrel, recovered 12' of 12', drop barrel								
23:45	01:15	1.50	Cut core #5 4196 - 4209.5								
01:15	02:00	0.75	Retrieve core barrel, recovered 13.5' of 13.5', drop barre	d							
02:00	03:15	1.25	Cut core #6 4209.5 - 4225								
03:15	04:15	1.00	Retrieve core barrel, recovered 10.5' of 15.5'								
04:15	05:15	1.00	Cut core #7 4225 - 4230								
05:15	06:00	0.75	Retrieve core barrel, recovered 3.8' of 5'								
									R	ECFIVI	- 1)
			Notes on missing recovery:								
			Core #1 Cut 13', recovered 6.2'; we estimate that 5.5' of	coal that w	as lost, .5'	rubblized coal	was cannister	ed	n	EC 13 20	10.A.—
			Core #3 Cut 11', recovered 6.8', we estimate that 4' of co	oal was rub	blized and	therefore, was	s not recovered	<u> </u>	טנ	<u>-6 13 21</u>	דטו
			Core #6 Cut 15.5, recovered 10.5', we estimate that 5' o	f coal was r	ubblized a	nd therefore, r	not recovered				
									DIV OF	OIL, GAS &	111111
			Based upon conversations with Corion's office, the though	ht is that th	ne coal is b	eing rubblized	as it is being o	Irilled.	U14. U1	WILL WAS A	191119119
			We will increase rotary RPM further, continue decreasing	WOB and	decrease	pump rate.					
TOTAL I	HOURS	24.00	1.		***						

DESC.	DAILY	CUM (hrs)
Drill	(hrs)	287.75
		-
Trip	5.25	41.00 7.50
Circulate	0.25	
Rig Repair		30.50
Rig Service		6.25
Dev Survey		2.75
NU/ND		21.00
Cement		2.50
Run Casing		8.00
woc		
OH Logging		
Mix Mud		
MI & RU		6.00
Rat Hole		
Mouse Hole		
Fishing		
Other	2.00	2.50
Coring	15.00	15.00
Inspect BHA		
Cut drig line		1.25
Wash & Ream		1.25
Drill Cement		8.25
Test BOPE	1.50	5.00
woo		
PU/LD BHA		4.50
inspicirc equip		3.50
TOTALS	24.00	454.50

	SUMMARY OF DAILY & CUMULATIVE	<u>.us</u>		T		1		
			DAILY		CUM		AFE	
COST CODE	DESCRIPTION OF DAILY COSTS		(\$)	1000	(\$)		(\$)	
2030.010	Land, Legal, Title, Survey, Arch, Damages, Permits, Signs			<u> </u>		ļ		
2030.031	Dirtwork, Road, Location, Pits, Liner			_		ļ		
2030.019	Contract Drilling 9480 / day 392.5 / h cond 5071 26,000 mob sfc 36791	\$	9,480		273,512			
2032.001	Water			\$	6,712			
2032.013	Drill Bits, Stabilizers, Reamers	\perp		\$	42,500			
2031.046	Cementing and Services			\$	26,636			
2030.053	Coring and Analysis	\$	28,570	\$	28,570			
2030.052	Logging							
2030.054	Mud Logging	\$	750	\$	6,750			
2030.037	Rental Equipment	\$	1,305	\$	35,910			
2030.028	Transportation			\$	13,898			
2032.004	Mud and Chemicals			\$	28,661			
	Directional Services, Mud Motors			\$	106,512			
	Intermediate casing			\$	70,415			
2030.035	Contract Labor			\$	6,661			
2030.022	Engineering / Supervision	\$	800	\$	17,600			
2030.099	Intangible Miscellaneous and Contingencies							
2040.001	Surface Casing			\$	17,790			
2040.004	Production Casing							
1011.000	Float Equipment, Shoes, Centralizers			\$	1,800			
1041.000	Wellhead Equipment			\$	9,971			
1073.000	Bottom Hole Pump / Gas Lift / Other							
1104.000	Drivehead, Engine / Motor and Hydraulic Pump / Electric Unit							
2040.052 / 2040.055	Valves and Fittings, Small / Large							
2040.067	Other Surface Equipment	Ī						
2040.099	Tangible Miscellaneous and Contingencies							
	TOTAL COSTS	s	40,905	s	693,898	\$		

	2	Date:	09/07/04		DA	ILY DR	ILLING		RT			_			Page 2
		1 1120 11	Well Na	me: '		Je		RECOR	D .		- Talija	-			
BIT	BIT			T		рертн	DEFTH	FOOTAGE	CUM BIT				BUT	B4	T GRADING
NO.	SIZE			SERIAL	JETS	1N	on	DAILLED	HOURS	ROP	WOB	RPM	TORQUE	In Out Bull Loc	Seals Gge Dull O
(9)	(in)	MFG	TYPE	NO.	(32/32/32)	(#)	(A)	(ft) 1 305	(hrs) 102.75	(f/hr) 12.7	36 - 43	45 / 60	(R -16e) 2100 - 2900		
1	12 1/4	Security	XL18N XL43	754840 10408516	14 / 14 / 14 / 16 18 / 18 / 18	1,799	1,799 2,698	1,305 899	83.25	10.8	35 - 40	45 / 45-70	1400 - 2200	8 8 WT ALL	FEF 1/8 BT ROP
3	12 1/4 12 1/4	Security Smith	F4	MT6085	18 / 18 / 18	2,698	3,522	824	83.25	9.9	35 - 40	45 / 60	1600 - 2550	8 8 WT ALL	EEE1/2 RG TOF
4	7 7/8	Smith	F57YOD	MT2530	12 / 13 / 12	3,522	4,156	634	68.50	9.3	23 - 28	55 - 60	1800 - 2400		-
CB1	7 7/8	Corion				4,156	4,230	74	15.00	4.9 #DIV/0!	6 - 10	45 - 80			
			+				ļ	0		#DIV/0!					
COMMEN	vts	Bits 1,2&3 with	mud motor and dis	ectional tools:	Bit 4 no mud mo	tor									
				7			79			CASING E	DATA	300		100	
	L EQUIP			 					EXTERNAL	INTERNAL			TOP	BOTTOM	
RENTAL	COSTS	COSTS		SIZE	WEIGHT	GRADE	CONN	DRIPT ID	COLLAPSE	YNELD	CAPACITY	LENGTH	SET AT	SET AT	
	(\$)	(5)							(psi)	(psi)	(bbis/ft)	(A)	(ft)	(R.KB)	
rving Qtrs \$	315	\$ 7,290		30"	NA	NA.				4 700	0.45450	40.00 500.00	2.00	40.00 498.00	
c Tank \$		\$ 980		13 3/8*	54.5	J55	ST&C ST&C	12.459 7.796	1,130 2,530	2,730 3,930	0.15450	3,545.00	0.00	3,520.00	
tajohn \$		\$ 1,050 \$ 440		8 5/8"	32	J55	Siac	7,796	2,330	3,330	0.0000	0,040.00			
tajohn \$		\$ 1,100													
d Cleaner \$		\$ 9,250	-					8	оттомно					1	
R \$	100	\$ 2,200								MAXIMUM	MINIMUM	LENGTH			
odniler \$	90	\$ 1,790			<u></u> . Foa	PROV		BOX	AD SIZE	O.D. (In)	(.D. (in)	(ft)	HOURS RUN	HRS SINCE INSPECTION	
mud cinr		\$ 975 \$ 5,585	D€	SCRIPTION OF	D/A		non	5" DDD	5° DDD	7.875	3.000	1.91			
collars	250	\$ 5,250		Core Barre			rion	5° DDD	5° DDD	6,563	4.125	24.14			
* Sub				Seatsub		Co	rion	5° DDD	5° DDD	6.438	4.125	1.62			
×		\Box		Double box s			rion	5* DDD	5° DDD	6.500 6.500	4.125 4.250	2.78 341.00		 	
*			12	- 6.5 Drill Co			nerford	5" DDD 4 1/2 IF	5° DDD	6.500	4.250	1.97			
*				Cross over		14490									
×											L	ļ			
·											ļ ——				
TOTALS \$	1,305	\$ 35,910						L							
7 1224		18-17-11-11	i Talifara	1.155			DRILLIN	G MUD R	EPORT						
SAMPLE	-	MUD	FUNNER.		1.140%	GEL	FILTRATE	CALCIUM	CAKE THICKNESS	SOLIDS	SAND	рН	CHLORIDES	ALKAUNTY	LCM
DEPTH (R)	(hh:mm)	WT. (ppg)	VISCOSITY (sec/qt)	PV/YP	KCL (%)	STRENGTH (by 100 R2)	API (ml/30 min)	(ppm)	(/32 ln)	(% vol)	(% vol)		(ppm)	Pf/Mf	lb/gal
3,530	18:30	8.30	26	1/0		0/0	NC	40	NC	0.0	0	7.5	2,800	0/4.4	Bicarbs 5368 mg
						ļ					ļ				
		L					<u> </u>						L		
NACCE A	177	77 Bar (1)				DA	ILY MUD	COST &	NVENTOR	Υ					
	- 1. TH								SOLKWICK	PACR	PHPA	CEGAR	TRUCKING		TOTAL COSTS
			BARITE (sx)	QUICK GEL	CAUSTIC (ex.)	LIME (ex)	SODA ASH	UNIDRILL (sx)	(sx)	(5x)	(g#)	(ex)	(5)		(\$)
NIT COST											ļ <u>.</u>			X	
TARTING INVENT	TORY		120								-	·		X	
MENTORY RECE				-								 			
SED LAST 24 HO				+							 				
				_		1									
NDING INVENTOR						1									28
IDING INVENTOR LILY MUD COST REVIOUS CUMUL	LATIVE COS			_											28
NDING INVENTOR AILY MUD COST REVIOUS CUMUL	LATIVE COS														28
	LATIVE COS						MUDIC	GGER R							28
IDING INVENTOR REVIOUS CUMUL IMULATIVE MUD	LATIVE COS	Jnits)	SHOW INTE			OF PENETRATI	ON		SHOW GAS DA		Formation	I	Price River	2100' Castlega	
IDING INVENTOR REVIOUS CUMUL IMULATIVE MUD	LATIVE COS	Inits)	SHOW INTE	10	BEFORE	OF PENETRATI	ON AFTER	BEFORE	SHOW GAS DA DURING	AFTER	Formation	Tops:		r 2100' Castlega	
MUD GA BACK GROUND	LATIVE COS D COST AS DATA (in I CONN GAS	Jnits)	FROM (ft)	10 (ft)	BEFORE (ft)	DURING (A)	ON AFTER (R)		SHOW GAS DA		Formation Sample per		Blackhawk		ite 3110'
DING INVENTOR ILLY MUD COST REVIOUS CUMUL MULATIVE MUD MUD GA BACK GROUND	LATIVE COS D COST	Inits) TRIP GAS		10	BEFORE		ON AFTER (N) 6 6	BEFORE UNITS 10 40	SHOW GAS DA DURING UNITS 1850 275	AFTER UNITS 10 20		centages:	Blackhawk	3420'	ite 3110'
DING INVENTOR ILY MUD COST EVIOUS CUMUL MULATIVE MUD MUD GA BACK GROUND	LATIVE COS D COST AS DATA (in I CONN GAS	Inits) TRIP GAS	FROM (n) 4016 4068 4082	10 (6) 4021 4069 4083	### BEFORE (ft) 4 4 4 7 7	DURING (R) .75 1.2	ON AFTER (8) 6 6 7	BEFORE UNITS 10 40 40	SHOW GAS DA DURING UNITS 1850 275 275	AFTER UNITS 10 20 20	Sample per	centages:	Blackhawk	3420'	ite 3110'
DING INVENTOR ILY MUD COST EVIOUS CLIMUL MULATIVE MUD MUD GA BACK GROUND	LATIVE COS D COST AS DATA (in I CONN GAS	Inits) TRIP GAS	(ft) 4016 4068 4082 4112	10 (8) 4021 4069 4083 4126	(h) 4 4 7 6	DURING (t) .75 .1.2 .1 .1	ON AFTER (%) 6 6 7 7 7	BEFORE UNITS 10 40 40 30	SHOW GAS DA DURING UNITS 1850 275 275 1600	AFTER UNITS 10 20 20 40	Sample per	centages:	Blackhawk	3420'	ite 3110'
DING INVENTOR ILY MUD COST EVIOUS CLIMUL MULATIVE MUD MUD GA BACK GROUND	LATIVE COS D COST AS DATA (in I CONN GAS	Inits) TRIP GAS	FROM (n) 4016 4068 4082	10 (6) 4021 4069 4083	### BEFORE (ft) 4 4 4 7 7	DURING (R) .75 1.2	ON AFTER (8) 6 6 7	BEFORE UNITS 10 40 40	SHOW GAS DA DURING UNITS 1850 275 275	AFTER UNITS 10 20 20	Sample per	centages:	Blackhawk	3420'	ite 3110'
DING INVENTOR ILLY MUD COST EVIOUS CLIMUL MULATIVE MUD MUD GA BACK GROUND	LATIVE COS D COST AS DATA (in I CONN GAS	Inits) TRIP GAS	(ft) 4016 4068 4082 4112	10 (8) 4021 4069 4083 4126	(h) 4 4 7 6	DURING (t) .75 .1.2 .1 .1	ON AFTER (%) 6 6 7 7 7	BEFORE UNITS 10 40 40 30 50	SHOW GAS DA DURING UNITS 1850 275 275 1600 465	AFTER UNITS 10 20 20 40	Sample per	centages:	Blackhawk	3420'	ite 3110'
DING INVENTOR LLY MUD COST EVIOUS CLIMUL MULATIVE MUD MULATIVE MUD GA BACK GROUND 10 - 50	LATIVE COST D COST US DATA (In I CONN GAS 30 - 50	Inta) TRIP GAS	FROM (ft) 4016 4068 4082 4112 4155	70 (8) 4021 4069 4083 4126 4156	### DEFORE (#) 4 4 7 6 8	DURING (R) .75 1.2 1 1 3	ON AFTER (8) 6 6 7 7 NA	BEFORE UNITS 10 40 40 30 50	SHOW GAS DA DUFUNG UNITS 1850 275 275 1600 465	AFTER UNITS 10 20 20 40 50	Sample per Sample Desc	centages:	Blackhawk	3420'	ite 3110'
DING INVENTOR LIT MUD GOST EVIOUS CLAMUL MUD GA BACK JANUAR BACK JANUAR JOHN JOHN JOHN JOHN Depth C	LATIVE COST D COST AS DATA (in I) CONN GAS 30 - 50	TRP GAS	(ft) 4016 4068 4082 4112	10 (8) 4021 4069 4083 4126	(h) 4 4 7 6	DURING (t) .75 .1.2 .1 .1	ON AFTER (8) 6 6 7 7 7 NA	BEFORE UNITS 10 40 40 30 50	SHOW GAS DA DURING UNITS 1850 275 275 1600 465	AFTER UNITS 10 20 20 40 50	Sample per	centages:	Blackhawk 45% Ss, 45	(3420' 5% Sitst, 10% C	DL Angle
DING INVENTOR LY MUD COST EVIOUS CLIMUL MULATIVE MUD MULATIVE MUD BACK BACK BROKEN 10 - 50	LATIVE COST D COST US DATA (In I CONN GAS 30 - 50	Inta) TRIP GAS	FROM (6) 4016 4016 4068 4082 4112 4155 DL Angle 0,19 0,76	70 (8) 4021 4069 4083 4126 4156 Depth 1407 1438	BEFORE (8) 4 4 7 6 8 Deviation 0.69 0.75	DURING (R) .75 1.2 1 1 3	ON AFTER (8) 6 6 7 7 7 NA DEVIAT DL Angle 1.35 0.39	BEFORE UNITS 10 40 30 50	Deviation 2.27 2.24	AFTER UNITS 10 20 20 40 50 Azimuth 147.80 156.50	Sample per Sample Desc Sample Desc DL Angle 0.66 1.11	Depth 3103 3133	Deviation 1.06 1.02	3420° 5% Sitst, 10% C Azimuth 174.90 175.60	DL Angle 0.98 0.14
DONG INVENTOR LY MUD COST EVOUS CAMUL MULLATIVE MUD BACK BACK BROUND 10 - 50 Depth 538 538 662	LATIVE COST D COST AS DATA (p. 1) CONN GAS 30 - 50 Deviation 1.03 1.22 1.20	Azimuth 154.79 189.53 136.37	FROM (6) 4016 4068 4082 4112 4155 DL Angle 0.19 0.76 0.17	70 (8) 4021 4069 4083 4126 4156 Depth 1407 1438	BEFORE (8) 4 4 7 6 8 Deviation 0.69 0.75 0.73	DURING (R)	ON AFTER (8) 6 6 7 7 7 NA DEVIAT DL Angle 1.35 0.39 0.47	DEFORE UNITS 10 40 40 30 50 ION SU Depth 2244 2275 2306	Deviation 2.27 Deviation 2.27 Deviation 2.27 2.24 2.06	AFTER UNITS 10 20 20 40 50 Azimuth 147.80 156.50 158.70	Sample per Sample Desc Dt. Angle 0.66 1.11 0.64	Depth 3103 3133 3165	Deviation	Azimuth 174.90 174.00	DL Angle 0.98 0.14
Depth C 538 C 602 C 603	LATIVE COST D COST CONN GAS 30 - 50 Deviation 1.03 1.22 1.20 1.25	Azimuth 184.79 196.87 186.87	FROM (R) 4016 4068 4082 4112 4155 DL Angle 0.19 0.76 0.17 0.21	70 (8) 4021 4069 4083 4126 4156 Depth 1407 1438 1468 1499	No. No.	Azimuth 190.80 190.50 201.30 218.50	ON AFTER (R) 6 6 7 7 7 NA DEVIAT DL Angle 1.35 0.39 0.47 0.83	BEFORE UNITS 10 40 40 30 50 ION SU Depth 2244 2275 2306 2337	Deviation 2.27 2.24 2.06 2.05	AFTER UNITS 10 20 20 40 50 Azimuth 147.80 156.50 158.70 157.60	Dt. Angle 0.66 1.11 0.64 0.13	Depth 3103 3185 3196	Deviation 1.06 1.02 1.15	Azimuth 174.90 175.60 167.30	DL Angle 0.98 0.14 0.42 0.58
No. Inventor No.	Deviation 1.03 1.22 1.20 1.34	Azimuth 184.79 198.53 166.87 180.49	FROM (6) 4016 4068 4082 4112 4155 DL Angle 0.19 0.76 0.17 0.68	TO (8) 4021 4069 4033 4126 4156 Depth 1407 1438 1489 1532	SEFORE (R) 4 4 7 6 8 8	DUFING (8) .75 1.2 1 1 1 3 Azimuth 190.80 190.50 201.30 218.50 206.70	ON AFTER (8) 6 6 7 7 NA DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08	BEFORE UNITS 10 40 40 30 50 ION SU Depth 2244 2275 2306 2337 2367	SHOW GAS DA DURING UNITS 1850 275 275 1600 465 PVEYS Deviation 2.27 2.24 2.06 2.05 1.95	AFTER UNITS 10 20 20 40 50 Azimuth 147.80 156.50 158.70 163.20	Dt Angle 0.66 1.11 0.64 0.13 0.73	Depth 3103 3135 3196 3226	Deviation 1.06 1.02 1.15 1.26 1.45	Azimuth 174.90 174.00	DL Angle 0.96 0.14 0.42
NUMBER N	Deviation 1.22 1.20 1.25 1.34 1.26	Azimuth 154.79 186.87 186.87 180.49 180.29	FROM (R) 4016 4068 4082 4112 4155 DL Angle 0.19 0.76 0.17 0.21	70 (8) 4021 4069 4083 4126 4156 Depth 1407 1438 1468 1499	No. No.	Azimuth 190.80 190.50 201.30 218.50	ON AFTER (R) 6 6 7 7 7 NA DEVIAT DL Angle 1.35 0.39 0.47 0.83	BEFORE UNITS 10 40 40 30 50 ION SU Depth 2244 2275 2306 2337	Deviation 2.27 2.24 2.06 2.05	AFTER UNITS 10 20 20 40 50 Azimuth 147.80 156.50 158.70 157.60	Dt. Angle 0.66 1.11 0.64 0.13	Depth 3103 3185 3196	Deviation 1.06 1.02 1.15	Azimuth 174.90 175.60 177.30 169.60	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82
Depth D D D D D D D D D D D D D D D D D D D	Deviation 1.03 1.22 1.20 1.34	Azimuth 184.79 198.53 166.87 180.49	FROM (8) 4016 4068 4082 4112 4155 DL Angle 0.19 0.76 0.17 0.21 0.68 0.28 0.36 0.89	TO (t) 4021 4069 4083 4126 4156 Depth 1407 1438 1499 1532 1563 1626	EFFORE (R) 4 4 4 7 6 8 8 Deviation 0,69 0,75 0,73 0,84 0,51 0,83 0,85 0,81	Exercises (8)	ON AFTER (6) 6 6 6 7 7 7 NA DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43	BEFORE UNTS 10 40 40 30 50 ION SU Depth 2244 2275 2306 2337 2367 2399 2429	SHOW GAS DA Durenng UNRTS 1850 275 1600 465 RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22	Azimuth 147.80 158.50 157.60 163.20 170.70 171.70	Dt. Angle 0.86 1.11 0.84 0.13 0.73 1.62 0.87 0.84	Depth 3103 3133 3165 3226 3227 3288 3320	Deviation 1.06 1.02 1.15 1.26 1.45 1.38 1.40	Azimuth 174.90 175.60 177.00 169.60 165.50 155.00 159.00	DLAngte 0.96 0.14 0.42 0.55 0.66 0.40 0.82 0.31
MUD GA M	Deviation 1.03 1.22 1.34 1.35 1.34 1.33	Azimuth 134.79 186.87 186.87 180.29 175.88 184.40 162.92	PROM (%) 4016 4068 4082 4112 4155 DL. Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.38 0.89 0.12	To (8) 4021 4069 4083 4126 4156 4156 4156 157	BEFORE (8) 4 4 4 7 6 8 8 Deviation 0.69 0.75 0.73 0.84 0.551 0.83 0.85 0.81 1.20	(k) 7.79 1.2 1 1 1 3 Azimuth 190.80 190.50 201.30 218.50 194.00 187.20 196.70 202.10	ON AFTER (6) 6 6 7 7 7 NA DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29	BEFORE UNITS 10 40 40 30 50 ION SU Depth 2244 2275 2306 2337 2399 2429 2460 2492	Deviation 2.27 2.27 2.27 2.24 2.06 2.05 1.48 1.22 0.96 0.96	Arter (Natis) 10 20 20 40 50 Azimuth 147.80 156.50 158.70 157.60 163.20 170.70 171.90	Dt. Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87	Depth 3103 3133 3165 3226 3257 3288 3320 3350	Deviation 1.06 1.15 1.26 1.45 1.38 1.40 1.36 1.36 1.40 1.36 1.	Azimuth 174.90 165.50 155.00 152.50	DL Angle 0.96 0.14 0.42 0.55 0.66 0.40 0.82 0.31 0.54
MUD GA BACK	Deviation 1.03 1.22 1.34 1.33 1.48	Azimuth 134.79 189.53 166.87 180.49 175.88 164.40 162.92 156.82	FROM (8) 4016 4068 4082 4112 4155 515 515 515 515 515 515 515 515 51	To (6) 4021 4069 4003 4126 4156 4156 4156 1407 1438 1459 1532 1555 1626 1657 1668	Deviation 0.69 0.73 0.84 0.51 0.83 0.55 0.81 1.20	DUPONG (8) 75 1.2 1 1 3 Azimuth 190.80 190.50 201.30 213.50 206.70 194.00 187.20 196.70 202.10 202.10	ON AFTER (K) 6 6 6 7 7 NA DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65	BEFORE UNTS 10 40 40 30 50 CON SU Depth 2244 2275 2306 2337 2367 2399 2429 2460 2492 2523	SHOW GAS DA DURING UNITS 1850 275 1600 465 Peviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.96 0.96	After Dwirs 10 20 20 20 40 50 50 50 156.50 157.60 163.20 170.70 177.70 177.90 1	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17	Depth 3103 3185 3196 3226 3220 3330 3331	Deviation 1.06 1.02 1.15 1.26 1.45 1.40 1.40 1.38 1.18	Azimuth 174.90 175.60 174.00 167.30 169.60 155.00 155.00 154.50 154.50	DL Angle 0.98 0.14 0.42 0.58 0.66 0.40 0.62 0.31 0.54 0.79
No. Inventor No.	Deviation 1.03 1.22 1.20 1.34 1.32 1.34 1.33 1.48 1.43	Azimuth 184.79 189.53 186.87 180.29 175.88 164.40 162.92 143.19	FROM (#) 4016 4068 4082 4112 4155 DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.68 1.29	To (8) 4021 4069 4083 4126 4156 4156 4156 4156 4156 4156 4156 415	Deviation 0.69 0.75 0.73 0.84 0.51 0.85 0.81 1.20 0.88	D. Fring (b) 75 1.2 1 1 1 3 Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 196.70 202.10 202.10 179.00	ON AFTER (6) 6 6 6 7 7 7 NA DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23	BEFORE UNITS 10 40 30 50 ION SU Depth 2244 2275 2306 2337 2367 2399 2440 2492 22523 2553	SHOW GAS DA DURING UNITS 1850 275 1600 465 RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.96 0.96	Arter (Netrs) 10 20 20 40 50 50 Azimuth 147.80 156.50 157.90 163.20 170.70 171.70 171.90 171.90	DL Angle 0.64 0.73 1.62 0.87 0.84 0.01 0.17 1.07	Depth 3103 3133 3165 3226 3227 3288 3320 3350 3381 3413	Deviation 1.06 1.02 1.15 1.38 1.40 1.36 1.36 1.36 1.36 1.36 1.36 1.36 1.36	Azimuth 174.90 165.50 155.00 152.50	DL Angle 0.96 0.14 0.42 0.55 0.66 0.40 0.82 0.31
No. Inventor No.	Deviation 1.03 1.22 1.34 1.33 1.48 1.43 0.84	Azimuth 154.79 180.53 186.87 180.29 175.88 164.40 162.92 156.82 143.19 137.08	FROM (8) 4016 4068 4082 4112 4155 515 515 515 515 515 515 515 515 51	To (8) 4021 4069 4003 4126 4156 4156 4156 4156 4156 4156 4156 415	Deviation 0.69 0.73 0.84 0.51 0.83 0.55 0.81 1.20	DUPONG (8) 75 1.2 1 1 3 Azimuth 190.80 190.50 201.30 213.50 206.70 194.00 187.20 196.70 202.10 202.10	ON AFTER (K) 6 6 6 7 7 NA DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65	BEFORE UNTS 10 40 40 30 50 CON SU Depth 2244 2275 2306 2337 2367 2399 2429 2460 2492 2523	SHOW GAS DA DURING UNITS 1850 275 1600 465 Peviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.96 0.96	After Dwirs 10 20 20 20 40 50 50 50 156.50 157.60 163.20 170.70 177.70 177.90 1	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17	Depth 3103 3185 3196 3226 3220 3330 3331	Deviation 1.06 1.02 1.15 1.26 1.45 1.40 1.40 1.38 1.18	Azimuth 174.90 175.50 169.50 169.50 169.50 159.00 152.50 154.50 159.00	DLAngte 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33
No. Inventor No.	Deviation 1.03 1.22 1.20 1.34 1.32 1.34 1.33 1.48 1.43	Azimuth 184.79 189.53 186.87 180.29 175.88 164.40 162.92 143.19	PROM (%) 4016 4068 4082 4112 4155 PL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.59 0.12 0.68 1.29 1.88	To (8) 4021 4069 4083 4126 4156 4156 4156 4156 4156 4156 4156 415	Deviation 0.89 0.75 0.73 0.84 0.51 0.85 0.81 1.20 1.00 0.88	(t) (t) (7) (12) (13) (14) (15) (15) (15) (15) (15) (15) (15) (15	ON AFTER (8) 6 6 6 7 7 7 NA DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04	DEFORE UNITS 10 40 40 30 50 ION SU Depth 2244 2275 2306 2337 2399 2429 2460 2492 2523 2553 2554	Deviation 2 27 2 24 2.06 2.05 1.48 1.22 0.96 0.96 0.91 1.23 1.10	Azimuth 147.80 158.70 170.70 171.70 171.90 171.20 163.70	Dt. Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.00 0.17	Depth 3103 3135 3196 3226 3257 3288 3350 3351 3413 3443	Deviation 1.06 1.02 1.15 1.26 1.38 1.40 1.36 1.16 1.36 1.16 1.36 1.36 1.36 1.17 1.36 1.17 1.36 1.17 1.36 1.17 1.36 1.17 1.36 1.17 1.18 1.18 1.18 1.18 1.18 1.18 1.18	Azimuth 174.90 167.30 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60	DL Angle 0.96 0.14 0.42 0.55 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
Depth C Depth C Depth C Depth C Depth C Depth C Depth C Depth C Depth C Depth C Depth C Depth C Depth C Depth C Depth C Depth	Deviation 1.03 1.25 1.34 1.33 1.48 1.33 1.48 0.50 0.50	Azimuth 134.79 180.53 186.87 180.29 175.83 184.40 162.92 156.82 143.19 137.08 130.59 130.59 130.59 110.85	PROM (%) 4016 4068 4082 4112 4155 DL Angle 0,19 0,76 0,17 0,21 0,68 0,26 0,36 0,59 0,12 0,68 1,29 1,88 0,51 0,51 0,95	To (8) 4021 4069 4003 4126 4156 4156 4156 4156 4156 4156 4156 415	Deviation 0,69 0,75 0,73 0,84 0,51 1,20 1,00 0,88 0,84 0,93 1,12 1,05	(a) (b) (c) (c) (d) (d) (d) (d) (d) (d) (d) (d) (d) (d	ON AFTER (8) 6 6 7 7 7 NA DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.03 1.13 0.29 0.65 1.23 1.04 0.43 1.04 0.43 1.04 0.59	DEFORE UNITS 10 40 30 50 ION SU Depth 2244 2275 2306 2337 2399 2429 2460 2492 2523 2584 2614 2642	Deviation 2 27 2 24 2.06 2.05 1.48 1.22 0.96 0.91 1.23 1.10 1.30 1.60 1.55	Arter (Netrs) 10 20 20 40 50 156.50 157.60 163.20 170.70 171.70 171.20 170.50 163.70 155.40	Dt. Angle 0.86 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.84 0.19 0.87	Depth 3103 3135 3226 3227 3285 3350 3341 3443 3443 3503 3596	Blackhawk 45% Ss, 45 Deviation 1.06 1.02 1.15 1.26 1.45 1.38 1.40 1.36 1.12 1.19 1.16 1.34 1.50 2.00	Azimuth 174.90 167.30 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60	DL Angle 0.96 0.14 0.42 0.55 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
MILD GA	Deviation 1.03 1.22 1.34 1.33 1.48 1.43 0.84 0.71 0.86 0.50 0.91	Azimuth 154.79 180.49 180.49 180.49 180.49 180.49 180.49 180.49 180.29 175.88 184.40 182.92 156.82 143.19 137.08 130.59 112.85	PROM (#) 4016 4068 4082 4112 4155 DL Angle 0.19 0.76 0.17 0.21 0.68 0.36 0.39 0.12 0.68 1.29 1.85 0.51 0.95	To (6) 4021 4069 4003 4126 4156 4156 4156 4156 4156 4156 4156 415	Deviation 0.69 0.75 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05	Azimuth 190.80 190.50 201.70 201.30 218.50 206.70 194.00 187.20 190.00 187.20 190.00 187.20 190.00 187.20 190.00 187.20 190.00 187.20 190.00 187.20 190.00 187.20 190.00 187.20 190.00 187.20 190.00 187.20 190.00 187.20 190.00 187.20	ON AFTER (8) 6 6 6 7 7 NA DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 0.43 1.06 0.59 0.33	BEFORE UNITS 10 40 30 50 EON SU Depth 2244 2275 2306 2337 2367 2399 2429 2460 2492 2523 2553 2564 2614 2674 2672 2703	SHOW GAS DA DURING UNITS 1850 275 1800 465 RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.96 0.91 1.23 1.10 1.30 1.50 1.55 1.66	Arter (Natrs) 10 20 20 40 50 50 Azimuth 147.80 156.50 157.60 170.70 170.70 171.90 171.90 171.90 175.40 163.70 163.70 163.70 163.70 163.70	Dt. Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.80 1.20 0.80 1.20 0.80 1.20 0.80 1.20 0.80 1.20 0.18 0.48	Depth 3103 3133 3165 3226 3227 3228 3320 3331 3413 3443 3472 3593 3596 3686	Deviation 1.06 1.02 1.15 1.26 1.45 1.38 1.40 1.40 1.40 1.40 1.40 1.40 1.40 1.40	Azimuth 174.90 167.30 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60	DL Angle 0.96 0.14 0.42 0.55 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
Depth C Depth C Depth C Depth C Depth C Depth C Depth C Depth C Depth C Depth C Depth C Depth C Depth C Depth C Depth C Depth	Deviation 1.03 1.22 1.25 1.34 1.33 1.48 1.43 0.84 0.71 0.86 0.50 0.91	Azimuth 154.79 189.53 186.87 180.49 180.29 175.88 164.40 162.92 143.19 137.08 130.59 112.85 107.94 109.50 120.10	PROM (9) 4016 4068 4082 4112 4155 51 5 5 5 5 5 5 5 5 5 5 5 5 5 6 5 5 6 5 5 6 5 5 6 5 5 6 5 5 6 5 5 6 5 5 6 5 5 6 5 5 6 5 5 6 5 6 5 5 6 5 6 5 5 6 5 6 5 5 6 5 6 5 5 6 5 6 5 5 6 5 6 5 5 6 5 6 5 6 5 5 6 5 6 5 5 6 5 5 6 5 5 6 5 5 6 5 5 6 5 5 6 5 5 6 5 5 6 5 5 6 5 5 5 6 5 5 6 5 5 5 6 5 5 5 6 5 5 6 5 5 5 6 5 5 5 6 5 5 5 6 5 6 5 5 6 5 5 5 6 5 5 6 5 5 5 6 5	To (8) 4021 4069 4083 4126 4156 4156 4156 4156 4156 4156 4156 415	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 0.88 0.84 0.93 1.12 1.05 1.105 1.18	Durens (et)	ON AFTER (K) 6 6 6 7 7 7 NA DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 0.43 1.06 0.59 0.33 0.54	BEFORE UNITS 10 40 30 50 ION SU Depth 2244 2275 2306 2337 2367 2367 2460 2492 2460 2492 2523 2553 2584 2614 2644 2672 2703 2734	SHOW GAS DA DURING UNITS 1850 275 1600 465 1600 465 RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.96 0.96 0.96 1.23 1.10 1.30 1.60 1.58	After (Net 15) (Net 1	DL Angle Per Sample Desc	Depth 3103 3133 3165 3226 3257 3288 3320 3350 33413 3442 3503 3596 3586 3748	Deviation 1.06 1.02 1.15 1.26 1.45 1.38 1.40 1.40 1.36 1.12 1.09 1.16 1.34 1.50 2.00 2.25 2.50	Azimuth 174.90 167.30 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60	DL Angle 0.96 0.14 0.42 0.55 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
MNG INVENTOR MUD GA BACK ROUND 10 - 50 Depth 10 - 50 833 695 727 787 817 844 876 907 9936 971 1034 1036 1037	Deviation 1.03 1.25 1.34 1.33 1.48 1.33 1.48 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.5	Azimuth 154.79 189.53 186.87 180.29 175.88 184.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70	FROM (8) 4016 4068 4082 4112 4155 DL Angle 0,19 0,76 0,17 0,21 0,68 0,28 0,36 0,39 0,12 0,68 1,29 1,85 0,51 0,95 1,04 0,65 0,65 0,65 0,65 0,65 0,70 0,70 0,70 0,70 0,70 0,70 0,70 0,7	To (8) 4021 4069 4003 4126 4156 4156 4156 4156 4156 4156 4156 415	Deviation (8) 4 4 7 6 8 8 Deviation 0,69 0,75 0,73 0,84 0,51 0,83 0,85 0,81 1,20 1,00 0,88 0,84 0,93 1,12 1,05 1,18 1,30 1,75	(a) (b) (c) (c) (c) (d) (d) (d) (d) (d) (d) (d) (d) (d) (d	ON AFTER (8) 6 6 7 7 7 NA DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.13 0.29 0.65 1.23 1.04 0.43 1.04 0.43 1.04 0.59 0.33 0.54	DEFORE UNITS 10 40 30 50 ION SU Depth 2244 2275 2306 2337 2399 2429 2460 2492 2523 2584 2614 2672 2703 2734 2764	Deviation 2 27 1 195 1 1	Arter (Netrs) 10 20 20 40 50 156.50 156.50 157.60 163.20 170.70 171.20 170.10 163.70 163.70 163.70	Dt. Angle 0.86 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.80 1.20 0.80 1.20 0.80	Depth 3103 3133 3165 3196 3226 3257 3283 3350 3351 3443 3443 3472 3503 3596 3686 3748 3610	Deviation 1.06 1.02 1.15 1.38 1.40 1.36 1.12 1.09 1.16 1.34 1.50 2.00 2.25 2.30 3.00 3.00	Azimuth 174.90 167.30 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60	DL Angle 0.96 0.14 0.42 0.55 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
MNG INVENTOR	Deviation 1.03 1.20 1.25 1.34 1.48 1.43 0.84 0.71 0.86 0.50 0.91 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Azimuth 134.79 180.53 186.87 180.49 180.49 180.29 175.88 164.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57	PROM (#) 4016 4068 4082 4112 4155 DL Angle 0.19 0.76 0.17 0.21 0.68 0.36 0.89 0.12 0.68 1.29 1.85 0.51 0.95 1.04 0.65 0.62 0.40 0.53	To (6) 4021 4069 4003 4126 4156 4156 4156 4156 4156 4156 4156 415	Deviation 0.69 0.75 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.93 1.12 1.05 1.18 1.30 1.75 1.75	DEPING (R) DEP	ON AFTER (8) 6 6 6 7 7 NA DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.04 0.43 1.06 0.59 0.83 0.54 1.59 0.50	BEFORE UNITS 10 40 30 50 EON SU Depth 2244 2275 2306 2337 2367 2399 2429 2460 2492 2523 2553 2564 2614 2674 2773 27734 27734 27734 27734 2762	SHOW GAS DA DURING UNITS 1850 275 1800 465 RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.96 0.91 1.23 1.10 1.30 1.60 1.55 1.66 1.52 1.77 1.30	Arter (Net 15) Azimuth 147.80 156.50 157.60 170.70 170.70 170.70 171.90 171.90 171.90 175.40 163.70 163.70 163.70 163.10 177.10	DL Angle 0.86 1.11 0.64 0.13 1.62 0.87 0.86 0.17 1.02 0.80 1.20 0.	Depth 3103 3133 3165 3226 3257 3288 3320 3350 33413 3442 3503 3596 3586 3748	Deviation 1.06 1.02 1.15 1.26 1.45 1.38 1.40 1.40 1.36 1.12 1.09 1.16 1.34 1.50 2.00 2.25 2.50	Azimuth 174.90 167.30 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60	DL Angle 0.96 0.14 0.42 0.55 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
Depth C Sala Sa	Deviation 1.03 1.22 1.34 1.33 1.48 1.43 0.84 0.71 0.86 0.50 0.91 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Azimuth 154.79 189.53 186.87 180.29 175.88 184.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70	FROM (8) 4016 4068 4082 4112 4155 DL Angle 0,19 0,76 0,17 0,21 0,68 0,28 0,36 0,39 0,12 0,68 1,29 1,85 0,51 0,95 1,04 0,65 0,65 0,65 0,65 0,65 0,70 0,70 0,70 0,70 0,70 0,70 0,70 0,7	To (8) 4021 4069 4003 4126 4156 4156 4156 4156 4156 4156 4156 415	Deviation (8) 4 4 7 6 8 8 Deviation 0,69 0,75 0,73 0,84 0,51 0,83 0,85 0,81 1,20 1,00 0,88 0,84 0,93 1,12 1,05 1,18 1,30 1,75	(a) (b) (c) (c) (c) (d) (d) (d) (d) (d) (d) (d) (d) (d) (d	ON AFTER (8) 6 6 7 7 7 NA DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.13 0.29 0.65 1.23 1.04 0.43 1.04 0.43 1.04 0.59 0.33 0.54	DEFORE UNITS 10 40 30 50 ION SU Depth 2244 2275 2306 2337 2399 2429 2460 2492 2523 2584 2614 2672 2703 2734 2764	Deviation 2 27 1 195 1 1	Arter (Netrs) 10 20 20 40 50 156.50 156.50 157.60 163.20 170.70 171.20 170.10 163.70 163.70 163.70	Dt. Angle 0.86 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.80 1.20 0.80 1.20 0.80	Depth 3103 3133 3165 3296 3257 3288 3320 3350 3341 3443 3472 3503 3686 3748 3810 3902	Deviation	Azimuth 174.90 167.30 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60	DL Angle 0.96 0.14 0.42 0.55 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
MUD GA FACE	Deviation 1.03 1.20 1.25 1.34 1.48 1.43 0.84 0.71 0.86 0.50 0.91 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Azimuth 154.79 189.53 186.87 189.91 180.49 180.29 175.88 164.40 162.92 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57	PROM (#) 4016 4068 4082 4112 4155 DL Angle 0.19 0.76 0.17 0.21 0.68 0.36 0.59 0.12 0.68 1.29 0.68 1.29 0.51 0.95 0.05 0.51 0.95 0.05 0.05 0.05 0.05 0.05 0.05 0.05	To (8) 4021 4069 4083 4126 4156 4156 4156 4156 4156 4156 4156 415	Deviation 0.69 0.75 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.93 1.12 1.05 1.18 1.30 1.75 1.70 1.61	DEPING (R) DEP	ON AFTER (8) 6 6 6 7 7 NA DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.09 0.65 1.23 1.06 0.59 0.83 0.54 1.59 0.83 0.54 1.59 0.83 1.06 0.59 0.83 1.06 0.59 0.83 1.15 0.50 0.39 1.12 1.05	BEFORE UNITS 10 40 30 50 ION SU Depth 2244 2275 2306 2337 2367 2367 2369 2449 2452 2553 2554 2614 2644 2676 2773 2734 2764 2826 2856	SHOW GAS DA DURING UNITS 1850 275 1850 465 1850 465 RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.96 0.91 1.23 1.10 1.30 1.60 1.55 1.66 1.82 1.77 1.30 1.90 0.90	Arter (Net 15) Azimuth 147.80 156.50 157.60 163.20 170.10 171.90 171.90 171.90 171.90 171.90 183.70 183.10 177.90 183.40 184.00 196.10	DL Angle 0.86 1.11 0.84 0.13 1.62 0.87 0.80 1.20 0.18 0.48 1.02 0.25 0.79 0.94 1.01 0.72	Depth 3103 3133 3165 3226 3227 3286 3320 3350 33413 3413 3442 3503 3596 3748 3810 3996	Deviation 1.06 1.02 1.15 1.26 1.38 1.40 1.30 1.16 1.30 1.16 1.30 1.40 1.30 1.30 1.30 1.30 1.30 1.30 1.30 1.3	Azimuth 174.90 167.30 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60	DL Angle 0.96 0.14 0.42 0.55 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
Depth C Sala Sa	Deviation 1.03 1.22 1.34 1.35 1.34 1.36 1.48 1.43 0.84 0.71 0.86 0.50 0.91 1.00 1.00 1.01 0.01 0.01 0.01 0.0	Azimuth 154.79 189.53 186.87 189.91 180.49 180.29 175.88 164.40 162.92 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 185.70 235.75	PROM (#) 4016 4068 4082 4112 4155 PL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.65 0.62 0.40 0.53 0.33 0.62 1.44 2.30	To (8) 4021 4069 4083 4126 4156 4156 4156 4156 4156 4156 4156 415	Deviation (4) 4 4 7 6 8 Deviation 0,69 0,75 0,73 0,84 0,51 0,83 0,85 0,81 1,20 1,00 0,88 0,84 0,93 1,12 1,05 1,16 1,30 1,76 1,77 1,61 1,191 1,88	D. Frence (bt) (ct) (ct) (ct) (ct) (ct) (ct) (ct) (c	ON AFTER (%) 6 6 6 7 7 7 NA DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.45 1.23 1.04 0.50 1.29 0.65 1.23 1.04 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0	BEFORE UNITS 10 40 30 50 CON SU Depth 2244 2275 2306 2337 2367 2399 2429 2460 2492 2523 2553 2584 2614 2644 2672 2703 2734 2764 2826 2836 2837	SHOW GAS DA DURING UNITS 1850 275 1850 275 1600 465 RVEYS Deviation 2,27 2,24 2,06 2,05 1,95 1,48 1,22 0,96 0,96 1,23 1,10 1,30 1,60 1,58 1,66 1,82 1,77 1,30 1,60 1,58 1,82 1,77 1,30 1,00 1,00 1,00 1,00 1,00 1,00 1,00	Arter (New 15) (New 1	DL Angle 0.66 0.66 0.73 0.84 0.01 0.17 0.82 0.80 0.82 0.80 0.82 0.80 0.18 0.19 0.19 0.10 0.1	Depth 3103 3133 3165 3226 3227 3286 3320 3350 33413 3413 3442 3503 3596 3748 3810 3996	Deviation 1.06 1.02 1.15 1.26 1.38 1.40 1.30 1.16 1.30 1.16 1.30 1.40 1.30 1.30 1.30 1.30 1.30 1.30 1.30 1.3	Azimuth 174.90 167.30 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60	DL Angle 0.96 0.14 0.42 0.55 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
Depth C	Deviation 1.03 1.25 1.34 1.43 1.43 1.43 1.48 1.43 1.48 1.49 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Azimuth 184.79 189.53 186.87 180.29 175.88 184.40 182.92 156.82 156.82 156.82 167.94 109.50 120.10 126.70 132.57 132.57 132.57 133.09 141.51 185.70 235.75 203.90	FROM (#) 4016 4068 4082 4112 4155 DL Angle 0.19 0.76 0.17 0.21 0.68 0.28 0.36 0.89 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.62 1.48 2.30 0.51	To (8) 4021 4069 4083 4126 4156 4156 4156 4156 4156 4156 4156 415	Deviation (8) 4 4 7 6 8 8 Deviation 0.69 0.75 0.73 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.18 1.30 1.75 1.70 1.61 1.91 1.88 1.95 1.74	D. Freins (%)	ON AFTER (8) 6 6 7 7 7 NA DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.13 0.29 0.65 1.23 1.04 0.43 1.09 0.65 1.29 0.65 0.50 0.31 0.54 0.59 0.50 0.39 0.112 0.05 0.20 0.20 0.20 0.20 0.20 0.20 0.2	DEFORE UNITS 10 40 30 50 EON SU Depth 2244 2275 2306 2337 2399 2429 2460 2492 2523 2584 2614 2672 2703 2734 2764 2826 2887 2919 2951	Deviation 2.27 1.90 1.95 1.10 1.30 1.10 1.30 1.10 1.30 1.10 1.30 1.55 1.68 1.82 1.77 1.30 1.20 0.90 0.90 0.90 0.90	Arter (Netrs) 10 20 20 40 50 50 158.70 156.50 158.70 177.70 171.90 171.20 170.60 163.70 163.70 177.40 177.9	Sample pet Sample Desc.	Depth 3103 3133 3165 3226 3227 3286 3320 3350 33413 3413 3442 3503 3596 3748 3810 3996	Deviation 1.06 1.02 1.15 1.26 1.38 1.40 1.30 1.16 1.30 1.16 1.30 1.40 1.30 1.30 1.30 1.30 1.30 1.30 1.30 1.3	Azimuth 174.90 167.30 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60	DL Angle 0.96 0.14 0.42 0.55 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
MNG INVENTOV Y MUD GAS MUD GA BACK RULATIVE MUD 10 - 50 10 - 50 10 - 50 833 664 695 727 787 884 8876 907 936 907 936 907 1128 1159 11191 1221 1222 1283 1314	Deviation 1.03 1.22 1.25 1.34 1.48 1.43 0.84 0.71 0.86 0.50 0.50 0.91 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Azimuth 154.79 180.53 186.87 180.87 180.29 175.88 194.40 162.92 156.82 194.39 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75 203.90 173.03	FROM (#) 4016 4068 4082 4112 4155 DL Angle 0.19 0.76 0.17 0.21 0.68 0.36 0.89 0.12 0.68 1.29 0.68 1.29 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.62 1.48 2.30 0.51	To (6) 4021 4069 4003 4126 4156 4156 4156 4156 4156 4156 4156 415	Deviation 0.69 0.75 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.93 1.12 1.05 1.16 1.30 1.75 1.70 1.61 1.91 1.88 1.95 1.74	DEPING (R) DEP	ON AFTER (8) 6 6 6 7 7 NA DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.04 0.43 1.06 0.59 0.83 0.54 1.59 0.50 0.39 1.12 1.05 0.26 1.03 0.86	DEFORE UNITS 10 40 30 50 EON SU Depth 2244 2275 2306 2337 2367 2399 2429 2460 2492 2452 2523 2553 2553 2564 2614 2624 2703 2734 2826 2856 2857 2919 2981	SHOW GAS DA DURING UNITS 1850 275 1850 465 RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.96 0.91 1.23 1.10 1.30 1.60 1.55 1.66 1.82 1.77 1.30 1.90 0.90 0.90 0.90	Arter (Net 15) Azimuth 147.80 156.50 157.60 163.20 170.10 171.90 171.20 170.60 163.70 163.70 163.70 163.10 177.19 178.90 184.00 196.10 191.00 205.50	Dt. Angle 0.86 1.11 0.84 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 1.07 0.82 0.80 1.20 0.18 0.48 1.02 0.25 0.79 0.94 1.01	Depth 3103 3133 3165 3226 3227 3286 3320 3350 33413 3413 3442 3503 3596 3748 3810 3996	Deviation 1.06 1.02 1.15 1.26 1.38 1.40 1.30 1.16 1.30 1.16 1.30 1.40 1.30 1.30 1.30 1.30 1.30 1.30 1.30 1.3	Azimuth 174.90 167.30 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60	DL Angle 0.96 0.14 0.42 0.55 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
MUD GA	Deviation 1.03 1.25 1.34 1.43 1.43 1.43 1.48 1.43 1.48 1.49 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Azimuth 184.79 189.53 186.87 180.29 175.88 184.40 182.92 156.82 156.82 156.82 167.94 109.50 120.10 126.70 132.57 132.57 132.57 133.09 141.51 185.70 235.75 203.90	FROM (#) 4016 4068 4082 4112 4155 DL Angle 0.19 0.76 0.17 0.21 0.68 0.28 0.36 0.89 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.62 1.48 2.30 0.51	To (8) 4021 4069 4083 4126 4156 4156 4156 4156 4156 4156 4156 415	Deviation (8) 4 4 7 6 8 8 Deviation 0.69 0.75 0.73 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.18 1.30 1.75 1.70 1.61 1.91 1.88 1.95 1.74	D. Freins (%)	ON AFTER (8) 6 6 7 7 7 NA DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.13 0.29 0.65 1.23 1.04 0.43 1.09 0.65 1.29 0.65 0.50 0.31 0.54 0.59 0.50 0.39 0.112 0.05 0.20 0.20 0.20 0.20 0.20 0.20 0.2	DEFORE UNITS 10 40 30 50 EON SU Depth 2244 2275 2306 2337 2399 2429 2460 2492 2523 2584 2614 2672 2703 2734 2764 2826 2887 2919 2951	Deviation 2.27 1.90 1.95 1.10 1.30 1.10 1.30 1.10 1.30 1.10 1.30 1.55 1.68 1.82 1.77 1.30 1.20 0.90 0.90 0.90 0.90	Arter (Netrs) 10 20 20 40 50 50 158.70 156.50 158.70 177.70 171.90 171.20 170.60 163.70 163.70 177.40 177.9	Sample pet Sample Desc.	Depth 3103 3133 3165 3226 3227 3286 3320 3350 33413 3413 3442 3503 3596 3748 3810 3996	Deviation 1.06 1.02 1.15 1.26 1.38 1.40 1.30 1.16 1.30 1.16 1.30 1.40 1.30 1.30 1.30 1.30 1.30 1.30 1.30 1.3	Azimuth 174.90 167.30 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60 169.60	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23

PUMP & CIRCULATING DATA															
			LINER SIZE	STROKE LENGTH	ASSUMED EFF	PUMP RATE	PUMP VOLUMETRIC DATA			CIRCULATING DETAILS			ANNULAR VELOCITY		
MUD										Standpipe	Motor	HEF	DP	DC	
PUMPS	MAKE	MODEL	(in)	(1n)	(%)	(spm)	(bble/stk)	(bbls/min)	(gal/min)	(psi)	Differential	(Sqin)	(f/min)	(f/min)	
NO. 1	National	7P50	6.25	7.75	95.00%	90	0.0736	6.29	264	1,210	no MM	3.09	155	327	
NO. 2															
NO. 3															
COMBINED															



WELL NAME Jersen 1-18 43-007-30018 LOCATION BATA NW NWA-Sec 16 T-12S, R-10E GL KB GL KB COUNTY, STATE Carbon County, Utah

E._RGREEN OPERATING, INC. DAILY DRILLING REPORT

RIG CONTACT IN	FORMATION:
OFFICE TRAILER / FAX:	970 942 7543
CONSULTANT HAND CELL:	303 913 1054
DOGHOUSE:	307 258 7315
DUENES.	

DATE SPUD DATE	SAM DEPTH
9/8/20044 8/16/2004	4230
REPORT NO.	24 HR FOOTAGE
23	4,230
DRLG CONTRACTOR	DAYS SINCE SPUD
Elenburg, Rig 12	23
CONSULTANT	AFE# API#
John C. Lamb	43-007-30718

ACTIVITY AT REPORT TIME:

Cutting core #11

DAILY COST

\$ 58,890 \$ 753,988 \$ -

CH	IRONOL OC	Y OF DAIL	Y OPERATIONS (06:00 -	6:00 HRS)	SLOW	PUMP RA	TE DATA:		STRIN	G WEIGHT INFO	ORMATION:
ROM	то	HOURS	Activity:		Depth	SPM	Pressure	Eff BHA WI	Rotating: 97,000	Slackoff: 96,000	Hoisting: 98,000
(hrs)	(hrs)	(hrs)			4264	54	300	L ~	97,000	30,000	00,000
06:00	07:30	1.50	Circulate & discuss poor prese	vation of recovered coal	(rubblizing	of coal stra	ta)				
07:30	07:45	0.25	Drop barrel						DF		
07:45	11:15	3.50	Cut core #8 4230 - 4253 - atter	npt to cut core with highe	r rotary spe	ed, lighter	WOB and less	s volume - unal	ole to keep Ki	7IVI	
11:15	12:15	1.00	Retrieve core barrel, recovered	22.9' of 23'; drop barrel							
12:15	14:30	2.25	Cut core #9 4253 - 4264								
14:30	15:30	1.00	Retrieve core barrel, recovered	8.5' of 11'							
15:30	16:00	0.50	Circulate to clean hole								
16:00	20:15	4.25	Trip out of hole slickly with no t	ght spots							
20:15	22:00	1.75	Break off and lay down bit; pick	up new bit; service and a	idjust inner	barrel bear	ings				
22:00	02:30	4.50	Trip in hole			10,0					
02:30	04:00	1.50	Cut core #10 4264 - 4270								
04:00	05:15	1.25	Retrieve core barrel, recovered	6' of 6', drop barrel							
05:15	06:00	0.75	Cut core #11 4270 - 4273								
			Notes on cores: Core #7 Cut 5' recovered 3.8'	missing footage was from	m bottom al	core did r	not have break	· · · · · · · · · · · · · · · · · · ·			
	 -		Core #8 Cut 23', recovered 22							RECE	WED
			Core #9 Cut 11', recovered 8.5	: missing footage from b	ottom of co	re and from	thin rubblized	d coal near top	of core	· Kilina haid fine	. 1 ¥ lan. la./
	-	-	Tele feetless aggressive bit (par	whit has closely spaced	3/8" cutters	instead of	widely spaced	5/8" cutters)			
		 	Core #10 Cut 11', recovered 1	I': one thin coal was brok	en but not i	ubblized as	s in previously	cut cores usin	g more aggre	ssire oit	3 2004
	<u> </u>	 			.,,						
	 	 							JIV	. UH OIL. G	AS & MINING
						-					
	 										
	 	 									
	1	1									

SUMMARY OF RIG HOURS										
	DAILY	CUM								
DESC.	(hrs)	(hrs)								
Drill		287.75								
Trip	8.75	49.75								
Circulate	1.50	9.00								
Rig Repair		30.50								
Rig Service		6.25								
Dev Survey		2.75								
NU / ND		21.00								
Cement		2.50								
Run Casing		8.00								
woc										
OH Logging										
Mix Mud										
MI & RU		6.00								
RatHole										
Mouse Hole										
Fishing										
Other		2.50								
Coring	12.00	27.00								
Inspect BHA										
Cut drig line		1.25								
Wash & Ream		1.25								
Drill Cement		8.25								
Test BOPE		5.00								
woo										
PU/LD BHA	1.75	6.25								
insp circ equip		3.50								
TOTALS	24.00	478.50								

	SUMMARY OF DAILY & CUMULATIVE O							
		1.	DAILY		CUM		AFE	
COST CODE	DESCRIPTION OF DAILY COSTS		(\$)		(\$)	400	(\$)	144
2030.010	Land, Legal, Title, Survey, Arch, Damages, Permits, Signs							
2030.031	Dirtwork, Road, Location, Pits, Liner			ļ				
2030.019	Contract Drilling 9480 / day 392.5 / h cond 5071 26,000 mob sfc 36791	\$	9,480	_	282,992		~	
2032.001	Water	_		\$	6,712			
2032.013	Drill Bits, Stabilizers, Reamers			\$	42,500			
2031.046	Cementing and Services	<u> </u>		\$	26,636			
2030.053	Coring and Analysis	\$	44,920	\$	73,490			
2030,052	Logging				***			
2030.054	Mud Logging	\$	750	-	7,500			
2030.037	Rental Equipment	\$	1,055	\$	36,965			
2030.028	Transportation	\$_	1,536	\$	15,434			
2032.004	Mud and Chemicals			\$	28,661			
	Directional Services, Mud Motors	_		\$	106,512			
	Intermediate casing			\$	70,415			
2030.035	Contract Labor	\$	349	\$	8,210			
2030.022	Engineering / Supervision	\$	800	\$	18,400			
2030.099	Intangible Miscellaneous and Contingencies							
2040.001	Surface Casing			\$	17,790			
2040.004	Production Casing							
1011.000	Float Equipment, Shoes, Centralizers			\$	1,800			
1041.000	Wellhead Equipment			\$	9,971			
1073.000	Bottom Hole Pump / Gas Lift / Other		-	L				
1104.000	Drivehead, Engine / Motor and Hydraulic Pump / Electric Unit			ļ				
2040.052 / 2040.055	Valves and Fittings, Small / Large							
2040.067	Other Surface Equipment							
2040.099	Tangible Miscellaneous and Contingencies			<u> </u>				
	TOTAL COSTS	\$	58,890	5	753,988	\$		

Report # 2	23_	Date:	09/08/04		DA	ILY DR	ILLING	REPO	RT						Page 2
			Well Na	me:		Je	nsen 1-18	T RECOR	<u> </u>						The Contract
						Ω€РТН	DEPTH	FOOTAGE	CLAM BIT			T —	BRT	64	IT GRADING
BIT	SIT SIZE	}		SERIAL	JETS	IN	OUT	DRILLED	HOURS	ROP	wos	RPM	TORQUE		
NO. (#)	SIZE (in)	MFG	TYPE	NO.	(32/32/32)	(A)	(#)	(A)	(hrs)	(IVIV)	(FT0)	MTR/TBL	(R-Ibs)	In Out Dull Loc 6 7 WT ALL	Seals Gge Dull Ott
1	12 1/4	Security	XL18N	754840	14 / 14 / 14 / 16	494	1,799	1,305	102.75	12.7	36 - 43 35 - 40	45 / 60 45 / 45-70	2100 - 2900 1400 - 2200		FEF 1/8 BT ROP
2	12 1/4	Security	XL43	10408516 MT6085	18 / 18 / 18 18 / 18 / 18	1,799 2,898	2,698 3,522	899	83.25 83.25	9.9	35 - 40	45 / 45 / 60	1600 - 2550		EEE1/2 RG TORG
3	7 7/8	Smith Smith	F57YOD	MT2530	12 / 13 / 12	3,522	4,156	634	68.50	9.3	23 - 28	55 - 60	1800 - 2400		LL EEE in
CB1	7 7/8	Corion	CMF573	N. J. Salar		4,156	4,264	108	20.75	5.2	6 - 10	45 - 80		few broken cutte	ns on inside gauge
CB2	7 7/8	Corion	CMR36			4,264	4,273	9	2.25	4.0	5		2600		
				1	Di dan mudan			0		#D IV/0!				·	
COMME	NTS	Bits 1,2&3 with	mud motor and dire	ectional tools	BR 4 no mua mo	tor				a cama a					
RENTA	L EQUIP	MENT								CASING D	ATA:		Top.	BOTTOM	i
RENTAL	DAILY	CUM							EXTERNAL COLLAPSE	INTERNAL	CAPACITY	LENGTH	TOP SET AT	SETAT	
ITEM	COSTS	COSTS		SIZE	WEIGHT	GRADE	CONN	DRIFTID	(psi)	(psi)	(bbls/ft)	(ft)	(ħ)	(R KB)	
	(5) \$ 315	\$ 7,605		30*	NA	NA.						40.00	0.00	40.00	
	\$ 45	\$ 1,025		13 3/8"	54.5	J55	ST&C	12.459	1,130	2,730	0.15450	500.00	2.00	498.00	
	\$ 60	\$ 1,110		8 5/8°	32	J55	ST&C	7,796	2,530	3,930	0.06090	3,545.00	0.00	3,520.00	
	\$ 20	\$ 460		<u></u>		1			لـــــــــــــــــــــــــــــــــــــ		L	L			
	\$ 50	\$ 1,150	F			Charles No.		8	оттомно	LE ASSEN	IBLY	. 41 24		Weight 1	Series of Histories
	\$ 375 \$ 100	\$ 9,625 \$ 2,300		7.5	- Lang Tang		78 0			MAXIMUM	MINIMUM		1.5 %		
	\$ 90	\$ 1,880						THRE	AD SIZE	O.D.	I.D.	LENGTH		HRS SINCE	
mud dinr		\$ 975	DES	SCRIPTION OF	BHA	PROV		вох	PIN	(in)	(fn)	(%)	HOURS RUN	INSPECTION 2.25	1 - 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
collars		\$ 5,585		Bit			non	5° DDD	5" DDD	7.875	3.000	1.91	2.25	2,25	
k Sub		\$ 5,250		Core Barre	ıl		non	5° DDD	5" DDD 5" DDD	6.563 6.438	4.125 4.125	1.62	23.00	23,00	
				Seatsub	.		rion	5° DDD	5" DDD	6.438	4.125	2.78	23.00	23.00	
		├ ───┤		- 6.5 Drill C			rion rion	5" DDD	5° DDD	6.500	4.250	341.00	23.00	23.00	
		+	- 12	Cross ove		Weath		4 1/2 IF	5° DDD	6.500	4.250	1.97	23.00	23.00	
		 											ļ		
													ļ		
						<u> </u>		 -	-			-	 		
OTALS \$	\$ 1,055	\$ 36,965	L					<u> </u>		<u> </u>	<u> </u>		<u> </u>		
	. "		1 12.	1125	Tani		DRILLIN	IG MUD R	EPORT						
AMPLE		MUD	FUNNEL	T in	in interest.	GEL	FILTRATE		CAKÉ		SAND			ALKALINITY	LCM
DEPTH	TIME	WT.	VISCOSITY	PV/YP	KCL	STRENGTH	API	CALCIUM	THICKNESS (/32 in)	SOLIDS (% vol)	CONTENT (% vol)	pН	CHLORIDES (ppm)	Pf/Mf	lb/gal
(R)	(hh:mm)	(PP9) 8.30	(s+c/qt) 26	1/0	(%)	0 / 0	(ml/30 min) NC	(ppm) 40	NC	0.0	0	7.5	2,800	0 / 4.4	Bicarbs 5368 mg
3,530	18:30	0.30		170		1		1 1							
_		 		† · · · · ·							<u> </u>		<u> </u>	ļ	
				C. School		D.A	II V MILID	COSTRI	NVENTOR	V .	888 8888	0000 PSV	V 1484 78888		1
			- 2 1400 S	1		1	ILI WOD	1		Will Silver	T	T	1.0.10		TOTAL
			BARITE	QUICK GEL	CAUSTIC	LIME	SODA ASH	UNIDRILL	SOLKWICK	PAC-R	PHPA	CEDAR	TRUCKING		costs
1.0386	<u> 340</u>		(=×)	(sx)	(sx)	(#x)	(6×)	(sx)	(sx)	(sx)	(gal)	(sx)	(5)		
T COST				-				-				 			
ARTING INVEN			120	 				 				† · · · · · ·			
ENTORY REC				+			_	†							
DING INVENTO				Ť"								L			
LY MUD COST											ļ	<u> </u>		-	20
EVIOUS CUMU		†		ļ				-				 	 		28
	LATIVE COS				<u> </u>		L					ــــــــــــــــــــــــــــــــــــــ			
MULATIVE MU								MAGED D							
				1. Vet4e			MUDIC		EPORT						
MULATIVE MU			SHOWINTE	T		OF PENETRATI	ON		SHOW GAS DA		Formation	Tone	Price Rive	2100' Castleda	ate 3110'
MULATIVE MU	JO COST	TRIP	SHOW INTE	10	RATE BEFORE	DURING	ON AFTER	BEFORE	SHOW GAS DA DURING	AFTER	Formation	Tops:		2100' Castlega 3420'	ate 3110'
MUD G. BACK GROUND	AD COST GAS DATA (In CONN GAS	TRIP GAS	FROM (ft)	70 (ff)	BEFORE (N)	DURING (R)	ON AFTER (f)	BEFORE	SHOW GAS DA DURING UNITS	AFTER UNITS			Blackhawl	3420'	
MUD G	AD COST	TRIP	FROM (ft) 4236	70 (ff) 4238		DURING	ON AFTER	BEFORE	SHOW GAS DA DURING	AFTER	Formation Sample per	centages:	Blackhawl Sitst & Ss	3420' w/ occ carb sh	
MUD G. BACK ROUND	AD COST GAS DATA (In CONN GAS	TRIP GAS	FROM (ft)	70 (ff)	BEFORE (N) 8	DURING (R) 2.5	ON AFTER (K) 8	BEFORE UNITS 30	SHOW GAS DA DURING UNITS 120	AFTER UNITS 30	Sample per	centages:	Blackhawl	3420' w/ occ carb sh	
MUD G. BACK SROUND	AD COST GAS DATA (In CONN GAS	TRIP GAS	FROM (ft) 4236	70 (ff) 4238	BEFORE (N) 8	DURING (R) 2.5	ON AFTER (K) 8	BEFORE UNITS 30	SHOW GAS DA DURING UNITS 120	AFTER UNITS 30	Sample per	centages:	Blackhawl Sitst & Ss	3420' w/ occ carb sh	
MUD G. BACK GROUND	AD COST GAS DATA (In CONN GAS	TRIP GAS	FROM (ft) 4236	70 (ff) 4238	BEFORE (N) 8	DURING (R) 2.5	ON AFTER (K) 8	BEFORE UNITS 30	SHOW GAS DA DURING UNITS 120	AFTER UNITS 30	Sample per	centages:	Blackhawl Sitst & Ss	3420' w/ occ carb sh	
MUD G. BACK SROUND	AD COST GAS DATA (In CONN GAS	TRIP GAS	FROM (ft) 4236	70 (ff) 4238	BEFORE (N) 8	DURING (R) 2.5	ON AFTER (N) 8 6	BEFORE UNITS 30 30	SHOW GAS DA DURING LINES 120 225	AFTER UNITS 30	Sample per	centages:	Blackhawl Sitst & Ss	3420' w/ occ carb sh	
MUD G BACK ROUND 30	SAS DATA (In CONN. GAS. 30	TRIP GAS 250	FROM (ft) 4236 4251	10 (%) 4238 4254	8EFORE (N) 8 7 7	DURING (R) 2.5 2.5	ON AFTER (N) 8 6	BEFORE UNITS 30 30	SHOW GAS DA DUPUNG LIMITS 120 225	AFTER UNITS 30 30	Sample per Core Descrip	rcentages: otton:	Blackhawi Sitst & Ss minor coal	(3420' w/ occ carb sh s	and intbdd
MUD G. BACK ROUND 30	AS DATA (In CONN GAS 30	TRIP GAS 250 Azimuth	FROM (ft) 4236 4251	10 (%) 4238 4254 Depth	BEFORE (N) 8 7	DURING (R) 2.5 2.5 Azimuth	ON AFTER (N) 8 6	BEFORE UNITS 30 30 30 FION SU	SHOW GAS DA DUPUNG UNITS 120 225 RVEYS Deviation	AFTER UNITS 30 30 30 Azimuth	Sample per Core Descrip	rcentages: otion:	Blackhawk Sitst & Ss minor coal	w/ occ carb sh	and intbdd
MUD 6. BACK ROUND 30 Depth 538	SAS DATA (In CONN GAS 30	Azimuth	FROM (ft) 4236 4251 DL Angle 0.19	70 (%) 4238 4254 Depth 1407	BEFORE (N)	DURING (R) 2.5 2.5 2.5 Azimuth 190.80	ON AFTER (N) 8 6 DEVIA DL Angle 1.35	BEFORE UNIS 30 30 TION SU Depth 2244	Deviation Deviation 2.27	AFTER UNITS 30 30	Sample per Core Descrip	rcentages: otton:	Blackhawi Sitst & Ss minor coal	(3420' w/ occ carb sh s	and intbdd
MUD G. BACK ROUND 30 Depth 538 566	Deviation 1.03 1.22	TRIP GAS 250 Azimuth 134.79 169.53	FROM (ft) 4236 4251	10 (%) 4238 4254 Depth	BEFORE (N) 8 7	DURING (R) 2.5 2.5 Azimuth	ON AFTER (N) 8 6	BEFORE UNITS 30 30 30 FION SU	SHOW GAS DA DUPUNG UNITS 120 225 RVEYS Deviation	AFTER UNITS 30 30 30 Azimuth 147.80	Sample per Core Descrip	Depth 3103	Sitst & Ss minor coal	x/ 3420' w/ occ carb sh s Azimuth 174.90 175.60 174.00	DL Angle 0.96 0.14 0.42
MUD G. MU	SAS DATA (In CONN GAS 30 Deviation 1.03 1.22 1.20	Azimuth 184.79 195.53 186.87	FROM (ft) 4236 4251 DL Angle 0.19 0.76	70 (%) 4238 4254 Depth 1407 1438	BEFORE (N)	Azimuth 190.80 190.50	ON AFTER (%) 8 6 6 DEVIA 1 DL Angle 1.35 0.39	BEFORE UNTS 30 30 TION SU Depth 2244 2275	Deviation 2.27 2.24	AFTER UNITS 30 30 30 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	Sample per Core Descrip	Depth 3103 3133 3165 3196	Blackhawi Sitst & Ss minor coal Deviation 1.06 1.02 1.15	(3420' w/ occ carb sh s Azimuth 174.90 175.60 174.00 167.30	DL Angle 0.96 0.14 0.42 0.58
MUD G. BACK ROUND 30 Depth 538 566	Deviation 1.03 1.22	TRIP GAS 250 Azimuth 134.79 169.53	DL Angle 0.19 0.76 0.17 0.21 0.68	70 (%) 4238 4254 Depth 1407 1438 1468	BEFORE (8)	Aximuth 190.80 190.50 201.30 201.30 201.30	DEVIA DL Angle 1.35 0.39 0.47 0.83 1.08	BEFORE UNTS 30 30 30	Deviation 2.27 2.24 2.06 2.05 1.95	AFTER UNITS 30 30 30 Azimuth 147.80 156.50 158.70 157.60 163.20	Sample per Core Descrip	Depth 3103 3165 3196 3226	Deviation 1.06 1.15 1.26 1.45	Azimuth 174.90 176.90 189.60	DL Angle 0.96 0.14 0.42 0.55 0.66
MUD G. MUD G.	Deviation 1.03 1.22 1.20 1.25 1.34 1.26	Azimuth 184.79 185.87 186.87 180.49 180.29	DL Angle 0.19 0.76 0.17 0.21 0.68 0.26	Depth 1407 1438 1468 1498 1532 1563	Deviation 0.69 0.75 0.84 0.83 0.83 0.83 0.84 0.83 0.	Aximuth 190.80 190.50 201.30 206.70 194.00	DEVIA DEVIA DL Angle 1.35 0.39 0.47 0.83 1.08 1.13	BEFORE UNITS 30 30 30 30	Deviation 2.27 2.24 2.06 2.05 1.48	Azimuth 147.80 156.50 158.70 163.20 170.70	DL Angle 0.66 1.11 0.64 0.13 0.73	Depth 3103 3133 3196 3226 3257	Deviation 1.06 1.02 1.15 1.26 1.36 1.	x/ occ carb sh x/ occ carb sh x Azimuth 174.90 175.60 174.00 167.30 189.80 185.50	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40
MUD 6. MUD 6. BACK ROUND 30 Depth 538 566 602 633 664 695 727	Deviation 1.03 1.22 1.25 1.34 1.26 1.32	Azimuth 134.79 199.53 188.97 180.49 180.29 175.88	DL Angls 0.19 0.76 0.17 0.21 0.68 0.26 0.36	Depth: 1407 1438 1488 1489 1553 1595	Deviation 0.69 0.73 0.84 0.51 0.63 0.65	Azimuth 190.80 190.50 201.30 201.30 201.30 194.70 187.20	DEVIA DEVIA DL Angle 1.35 0.47 0.83 1.08 1.13 0.29	BEFORE UNTS 30 30 30 30 Depth 2244 2275 2306 2337 2367 2399 2429	RVEYS Deviation 2.27 2.24 2.06 2.05 1.98 1.22	Azimuth 147.60 158.70 157.60 163.20 170.10	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87	Depth 3193 3193 3196 3297 3288	Deviation	Azimuth 174.90 175.60 167.30 189.50 155.00	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82
MUD G. MUD G. MUD G. BACK ROUND 30 Depth 538 586 602 633 664 695 727 757	Deviation 1.03 1.22 1.34 1.26 1.34 1.34 1.34 1.34	Azimuth 134.79 189.53 186.87 180.49 180.29 175.88	DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.39 0.59	Depth 1407 1438 1499 1552 1563 1595 1626	Deviation 0.69 0.75 0.84 0.85 0.85 0.81	Azimuth 190.80 190.50 201.70 194.70 196.70 196.70	DEVIA DEVIA DL Angle 1.35 0.39 0.47 0.83 1.08 1.10 0.29 0.43	BEFORE UNTS 30 30 30 Depth 2244 2275 2306 2337 2367 2399 2429 2420	Deviation 2.24 2.05 1.95 1.48 1.22 0.96	Azimuth 147.80 156.50 157.60 170.70 170.10 171.70	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.84	Depth 3103 3185 3196 3226 3258 3320	Deviation	x/ occ carb sh x/ occ carb sh x Azimuth 174.90 175.80 174.00 169.80 185.50 185.50 159.00	DL Angle 0.96 0.14 0.42 0.56 0.66 0.40 0.82 0.31
MUD 6. BACK ROUND 30 30 30 30 30 602 633 664 695 727 757	Deviation 1.03 1.22 1.26 1.32 1.34 1.33	Azimuth 184.79 189.53 186.87 180.29 175.80 164.40 162.92	DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.38 0.38 0.12	Depth 1407 1438 1489 1532 1563 1595 1626 1657	Deviation 0.69 0.75 0.73 0.84 0.85 0.85 0.85 0.85 0.81 1.20	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 196.70 202.10	ON AFTER (8) 8 6 6	BEFORE UNITS 30 30 30	Deviation 2.27 2.24 2.06 2.05 1.48 1.22 0.96 0.96	Azimuth 147.60 158.70 157.60 163.20 170.10	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87	Depth 3193 3193 3196 3297 3288	Deviation	Azimuth 174.90 175.60 167.30 189.50 155.00	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82
MUD G. BACK ROUND 30 Depth 538 566 602 633 664 695 727 757 787 817	Deviation 1.03 1.22 1.26 1.32 1.34 1.33 1.44	Azimuth 134.79 199.53 188.91 180.49 175.88 164.40 162.92 175.88	DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.68	Depth 1407 1438 1583 1595 1625 1637 1638	Deviation 0.69 0.73 0.84 0.51 0.63 0.85 0.81 1.20	Aximuth 190.50 215.50 215.50 216.70 216.70 196.70 202.10 202.10 202.10 202.10 202.10 202.10	DEVIA 1 DEVIA 1 DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65	BEFORE UNTS 30 30 30 Depth 2244 2275 2306 2337 2367 2399 2429 2420	Deviation 2.24 2.05 1.95 1.48 1.22 0.96	Azimuth 147.80 156.50 157.60 163.20 170.70 171.90	DL Angle O.64 O.71 O.87 O.87 O.81 O.01 O.87 O.81 O.01 O.81 O.81 O.82 O.83 O.83 O.83 O.83 O.83 O.84 O.84 O.85 O.8	Depth 3103 3133 3195 3226 3257 3282 3320 3350	Deviation	## (3420' ## occ carb sh Azimuth	DL Angle 0.96 0.14 0.42 0.56 0.40 0.82 0.31
MUD G. MUD G. ROUND 30 30 538 566 602 633 664 695 727 757 787 817 844	Deviation 1.03 1.22 1.26 1.34 1.34 1.33 1.44 1.43	Azimuth 184.79 189.53 186.87 180.29 175.80 164.40 162.92	DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.38 0.38 0.12	Depth 1407 1438 1489 1532 1563 1595 1626 1657	Deviation 0.69 0.75 0.73 0.84 0.85 0.85 0.85 0.85 0.81 1.20	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 196.70 202.10	ON AFTER (8) 8 6 6	BEFORE UNTS 30 30 30 30 Depth 2244 2275 2306 2337 2367 2399 2429 2450 2452 2523	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.22 0.96 0.96 0.91	Azimuth 147.80 156.50 157.60 163.20 170.10 171.70 171.70	DL Angle 0.66 0.13 0.73 0.84 0.01 0.17 0.17	Depth 3103 3133 3165 3196 3226 3257 3288 3320 3350 3341 3443 3443	Deviation 1.06 1.15 1.26 1.40 1.10 1.	Azimuth 174.90 167.30 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00	DL Angle 0,96 0,14 0,42 0,58 0,66 0,40 0,82 0,31 0,54 0,79 0,33 0,23
MUD G. BACK ROUND 30 Depth 538 566 602 633 664 695 727 757 787 817	Deviation 1.03 1.22 1.26 1.32 1.34 1.33 1.44	Azimuth 134.79 189.53 186.87 180.29 175.88 164.40 162.92 143.19	DL Angle 0.19 0.76 0.17 0.21 0.68 0.29 0.12 0.68 1.29	Depth: 1407 1438 1488 1498 1532 1563 1563 1628 1637 1688 1720	Deviation 0.69 0.75 0.84 0.51 0.85 0.81 1.20 0.68	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 196.70 202.10 202.10 179.00	DEVIA DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23	BEFORE UNTS 30 30 30 Depth 2244 2275 2396 2337 2367 2397 2429 2450 2492 2523 2553	Deviation 2.27 2.24 2.06 2.05 1.95 1.22 0.96 0.91 1.23 1.10 1.30	Azimuth 147.80 156.50 157.60 170.70 170.10 171.70 171.20 170.60 163.70 157.40	DL Angle 0.66 0.64 0.13 0.73 0.62 0.87 0.17 1.07 0.62 0.80 0.8	Depth 3103 3195 3196 3257 3288 3320 3381 3443 3443 3442	Deviation	Azimuth 174.90 175.80 185.50 185.50 185.50 185.50 159.00 159.00 159.80	DL Angle 0.96 0.14 0.42 0.56 0.66 0.40 0.82 0.31 0.54 0.79
MUD 6. BACK ROUND 30 Depth 538 5586 602 633 664 695 727 757 787 817 844 876	Deviation 1.03 1.22 1.20 1.34 1.33 1.44 1.43 0.84 0.71 0.86	Azimuth 184.79 189.53 186.87 180.49 180.29 175.88 164.40 162.92 143.19 137.08 130.59 112.55	DL Angle 0.19 0.76 0.17 0.21 0.65 0.26 0.39 0.12 0.68 1.29 1.88 0.51	Depth. 1407 1438 1468 1532 1563 1595 1628 1720 1751 1762 1813	Deviation 0.69 0.75 0.84 0.51 0.85 0.81 1.20 0.88 0.84 0.93 1.12	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 197.90 1	DEVIA 1 0.43 1.29 1.04 1.06	BEFORE BEFORE UNTS 30 30 30 30 TION SU Depth 2244 2275 2306 2337 2367 2397 2460 2492 2452 2523 2553 2554 2614	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.96 0.96 0.96 0.91 1.23 1.10 1.30 1.60	Azimuth 147.80 156.50 158.70 170.70 171.90 171.90 170.60 163.70 157.60 163.70	DL Angle 0.66 1.11 0.64 0.15 0.87 0.84 0.01 0.17 0.84 0.01 0.17 0.82 0.80 1.20	Depth 3103 3103 3105 3226 3227 3286 3320 3351 3413 3443 3472 3503	Deviation 1.02 1.15 1.36 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.17 1.18 1.19 1.16 1.15 1.109 1.16 1.15 1	Azimuth 174.90 167.30 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00	DL Angle 0,96 0,14 0,42 0,58 0,66 0,40 0,82 0,31 0,54 0,79 0,33 0,23
MUD 6. BACK ROUND 30 Depth 538 566 602 633 664 695 727 787 817 844 876 907 936 971	Deviation 1.03 1.22 1.20 1.26 1.34 1.34 1.33 1.48 1.43 0.84 0.71 0.86 0.50	Azimuth 134.79 189.53 186.87 180.29 175.88 164.40 162.92 155.82 143.19 137.08 130.59 112.35	DL Angle 4236 4251 DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.59 0.12 0.68 1.29 1.88 0.51 0.95	TO (8) 4234 4254 4254 4254 4254 1407 1438 1468 1459 1532 1563 1595 1626 1657 1638 1720 1751 1751 1813 1344	Deviation 0.69 0.75 0.84 0.51 0.85 0.81 1.20 1.00 0.84 0.93 1.12 1.05	Azimuth 190.50 190.50 201.30 206.70 194.00 187.20 195.70 202.10 195.70 2	DEVIA DE Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.65 1.23 1.04 0.43 1.04 0.43	BEFORE UNTS 30 30 30 30 30 Depth 2244 2275 2306 2337 2399 2429 2450 2492 2553 2554 2614 2644 2672	Deviation 2.27 2.24 2.06 2.05 1.48 1.22 0.96 0.96 0.91 1.23 1.10 1.30 1.60 1.58	Azimuth 147.80 156.50 163.20 170.70 171.90 171.20 163.70 165.40 163.70 157.60 163.70 170.80 163.70 170.80 163.70 170.80 163.70 183.70	DL Angle Core Descrip 0.66 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.80 1.20 0.80	Depth 3103 3195 3196 3226 3320 3350 3341 3443 3472 3503 3596	Deviation 1.06 1.15 1.26 1.40 1.16 1.36 1.16 1.16 1.36 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.17 1.17 1.18 1.	Azimuth 174.90 167.30 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
MUD 6. BACK ROUND 30 30 Depth 538 566 602 633 664 695 727 757 787 817 844 876 907 936 907 936 971 1034	Deviation OAS 30 Deviation 1.03 1.22 1.20 1.25 1.34 1.26 1.32 1.48 1.43 0.71 0.86 0.50 0.91	Azimuth 134.79 189.53 186.97 185.91 180.49 175.88 164.40 162.92 175.82 143.19 137.08 130.59 112.85	DL Angle 4236 4251 DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51 0.95 1.04	Depth 1407 1433 1454 1575 1833 1844 1675	Deviation 0.69 0.73 0.84 0.51 0.63 0.85 0.81 1.20 1.00 0.84 0.93 1.12 1.05	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 197.20 196.70 202.10 202.10 179.00 187.80 184.00 184.00 184.00 185.00 186.00 186.00 186.00 186.00 186.00	DEVIA DEVIA DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 1.04 1.06 0.59 0.83	BEFORE UNTS 30 30 30 30 Depth 2244 2275 2306 2337 2367 249 249 2452 2523 2554 2614 2644 2672 2703	RVEYS Deviation 2.27 2.24 2.06 2.05 1.92 1.10 1.22 0.96 0.91 1.23 1.10 1.30 1.60 1.55 1.66	Azimuth 147.80 156.50 157.60 163.20 170.10 171.20 170.60 163.70 157.40 165.40 165.40 165.40	DL Angle Oce Descrip DL Angle Oce 0 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.80 1.20 0.18	Depth 3103 3195 3196 3227 3288 3320 33361 3443 3443 3472 3593 3596 3688	Deviation	Azimuth 174.90 167.30 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
MLD G. BACK ROUND 30 Depth 538 566 602 633 664 695 757 757 787 814 876 9907 9936 9911 1034 1066	Deviation GAS 30 Deviation 1.03 1.22 1.20 1.25 1.34 1.26 1.32 1.34 1.34 1.33 1.48 1.43 0.84 0.71 0.86 0.50 0.91	Azimuth 184.79 199.53 186.87 180.49 180.29 175.88 164.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10	DL Angle 0.19 0.76 0.17 0.21 0.65 0.89 0.12 1.88 0.51 0.95 1.04 0.65 0.65	Depth 1407 1438 1469 1532 1563 1575 1628 1720 1751 1762 1813 1844 1875 1906	Deviation 0.69 0.75 0.84 0.51 0.83 0.85 0.81 1.20 0.88 0.88 0.81 1.12 1.105 1.18 1.30	Azimuth 190.80 190.50 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.6 201.30 218.50 201.30 218.50 201.30 190.70 194.00 196.70 202.10 179.00 157.80 164.90 158.00 158.	DEVIA 1 DEVIA 1 DEVIA 1 DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.23 1.04 0.65 1.23 1.04 0.43 1.06 0.59 0.83	BEFORE UNTS 30 30 30 30 30 Depth 2244 2275 2306 2337 2367 2369 2429 2450 2452 2523 2553 2554 2614 2644 2672 2703 2734	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.96 0.91 1.23 1.10 1.30 1.60 1.58 1.68 1.62	Azimuth 147.80 156.50 158.70 170.10 171.10 171.90 171.90 165.40 163.70 163.70 163.70 163.70	DL Angle 0.66 1.11 0.64 0.15 0.87 0.87 0.84 0.01 0.17 0.17 0.62 0.80 1.20 0.18 0.48 1.02	Depth 3103 3133 3185 3226 3257 3288 3320 3351 3413 3442 3503 3566 3568 3748	Deviation 1.06 1.02 1.15 1.15 1.26 1.40 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.17 1.18 1.	Azimuth 174.90 167.30 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00	DL Angle 0,96 0,14 0,42 0,58 0,66 0,40 0,82 0,31 0,54 0,79 0,33 0,23
MUD 6. BACK ROUND 30 Depth 538 566 602 633 664 695 727 787 817 844 876 907 907 908 971 1034 1036 1097	Deviation 1.03 1.22 1.26 1.34 1.33 1.48 1.33 1.48 1.33 1.48 1.71 1.90 1.90 1.90 1.90 1.90 1.90 1.90 1.9	Azimuth 184.79 189.53 186.87 180.49 180.29 175.88 164.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70	DL Angle 4236 4251 DL Angle 0, 19 0,76 0,17 0,21 0,68 0,26 0,36 0,89 0,12 0,68 1,29 1,88 0,51 0,95 1,04 0,65 0,65 0,662 0,40	TO (8) 4234 4254 4254 4254 4254 4254 4254 4254	Deviation 0.69 0.75 0.83 0.84 0.51 0.83 0.85 0.81 1.20 0.84 0.93 1.12 1.05 1.18 1.30 1.75	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 157.80 157.80 158.00 1	DEVIA DEVIA DL Angle 1.35 0.39 0.47 0.83 1.13 0.29 0.65 1.23 1.04 0.43 1.04 0.43 0.59 0.83 0.59 0.83	BEFORE UNTS 30 30 30 30 30 Depth 2244 2275 2306 2337 2399 2429 2450 2492 2523 2554 2614 2672 2703 2734 2764	Deviation 227 2.24 2.06 2.05 1.48 1.22 0.96 0.91 1.10 1.30 1.58 1.68 1.52 1.77	Azimuth 147.80 156.50 163.20 170.70 171.20 171.20 163.70 163.70 163.70 163.70 163.70 163.70 163.70	DL Angle Core Descrip 0.66 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.80 1.20 0.18 0.43 1.20 0.25	Depth 3103 3195 3196 3226 3257 3288 3320 3350 3341 3443 3472 3503 3596 3686 3748 3810	Deviation 1.06 1.02 1.15 1.26 1.140 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.17 1.17 1.18 1.18 1.19 1.19 1.10 1	Azimuth 174.90 167.30 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00	DL Angle 0,96 0,14 0,42 0,58 0,66 0,40 0,82 0,31 0,54 0,79 0,33 0,23
MUD 6. BACK ROUND 30 30 30 30 602 633 664 695 727 787 817 844 876 907 936 907 936 911 1034 1066	Deviation GAS 30 Deviation 1.02 1.20 1.20 1.25 1.34 1.26 1.32 1.34 1.48 1.43 0.71 0.86 0.50 0.91 1.00 1.04 1.16	Azimuth 184.79 189.53 188.91 180.49 175.88 164.40 162.92 175.82 143.19 130.59 112.85 107.94 109.50 120.10 126.70 132.57	DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.59 0.12 0.68 1.29 0.51 0.51 0.95 1.04 0.65 0.62 0.40	Depth 1407 1433 1454 1575 1688 1770 1688 1813 1848 1875 1966 1935 1967 1967 1967 1967 1967 1967 1967 1967	Deviation 0.69 0.73 0.84 0.51 1.20 1.00 0.88 0.84 0.93 1.12 1.105 1.18 1.30	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 196.70 202.10 202.10 179.00 167.80 168.00 148.50 158.50 168.50 168.50 168.50 168.50	DEVIA DEVIA DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.04 1.04 0.43 1.06 0.59 0.83 0.54 1.59 0.50	BEFORE UNITS 30 30 30 30 30 30 30 3	RVEYS Deviation 2.27 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.96 0.91 1.30 1.60 1.58 1.66 1.52 1.77 1.30	Azimuth 147.80 156.50 157.60 170.70 170.10 171.20 170.60 163.70 157.40 165.40 1	DL Angle 0.66 0.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.80 1.20 0.18 0.48 1.02 0.25 0.79	Depth 3103 3195 3196 3226 3257 3288 3320 3330 3413 3413 3472 3503 3568 3748 3810 3902	Deviation 1.06 1.02 1.15 1.26 1.16 1.16 1.12 1.09 1.16 1.16 1.10 1.	Azimuth 174.90 167.30 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00	DL Angle 0,96 0,14 0,42 0,58 0,66 0,40 0,82 0,31 0,54 0,79 0,33 0,23
MLD G. BACK ROUND 30 Depth 538 566 602 633 664 695 757 757 787 817 844 876 9907 9936 991 1066 1097 11128 11159	Deviation GAS 30 Deviation 1.03 1.22 1.20 1.25 1.34 1.26 1.32 1.34 1.33 1.43 0.84 0.71 0.86 0.50 0.91 1.00 1.04 1.16	Azimuth 184.79 199.53 186.87 180.49 180.29 175.88 164.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57	DL Angle 4236 4251 DL Angle 0, 19 0,76 0,17 0,21 0,68 0,26 0,36 0,89 0,12 0,68 1,29 1,88 0,51 0,95 1,04 0,65 0,65 0,662 0,40	TO (8) 4234 4254 4254 4254 4254 4254 4254 4254	Deviation 0.69 0.75 0.84 0.81 1.20 0.88 0.84 0.81 1.20 0.88 0.84 0.10 0.88 0.84 0.10 0.88 0.84 0.10 0.88 0.84 0.	Azimuth 190.80 190.50 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.6 201.30 218.50 201.30 218.50 201.30 194.00 196.70 202.10 179.00 149.00 149.00 149.00 149.00 149.00 158.00	DEVIA DEVIA 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.23 1.04 0.65 1.23 1.06 0.59 0.83 0.54 1.59 0.50 0.39	BEFORE UNTS 30 30 30 30 30 Depth 2244 2275 2306 2337 2399 2429 2450 2492 2523 2554 2614 2672 2703 2734 2764	Deviation 227 2.24 2.06 2.05 1.48 1.22 0.96 0.91 1.10 1.30 1.58 1.68 1.52 1.77	Azimuth 147.80 156.50 163.20 170.70 171.20 171.20 163.70 163.70 163.70 163.70 163.70 163.70 163.70	DL Angle Core Descrip 0.66 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.80 1.20 0.18 0.43 1.20 0.25	Depth 3103 3195 3196 3226 3257 3288 3320 3350 3341 3443 3472 3503 3596 3686 3748 3810	Deviation 1.06 1.02 1.15 1.26 1.140 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.17 1.17 1.18 1.18 1.19 1.19 1.10 1	Azimuth 174.90 167.30 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00	DL Angle 0,96 0,14 0,42 0,58 0,66 0,40 0,82 0,31 0,54 0,79 0,33 0,23
MUD 6. PACK ROUND 30 30 30 30 30 30 30 30 30 30	Deviation 1.03 1.22 1.26 1.34 1.26 1.34 1.33 1.48 1.33 1.48 1.33 1.48 1.43 1.43 1.43 1.43 1.43 1.43 1.43 1.43	Azimuth 134.79 189.53 186.87 180.49 180.29 175.88 164.40 162.92 143.19 137.08 130.59 112.55 107.94 108.50 120.10 126.70 132.57 137.30 141.51	DL Angle 0.19 0.17 0.21 0.65 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53	Depth 1407 1433 1454 1575 1688 1770 1688 1813 1848 1875 1966 1935 1967 1967 1967 1967 1967 1967 1967 1967	Deviation 0.69 0.73 0.84 0.51 1.20 1.00 0.88 0.84 0.93 1.12 1.105 1.18 1.30	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 196.70 202.10 202.10 179.00 167.80 168.00 148.50 158.50 168.50 168.50 168.50 168.50	DEVIA DEVIA DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.04 1.04 0.43 1.06 0.59 0.83 0.54 1.59 0.50	BEFORE UNITS 30 30 30 30 30 Depth 2244 2275 2306 2337 2367 2399 2429 2460 2492 2452 2553 2554 2614 2644 2672 2703 2734 2764 2826 2826 2826	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.96 0.96 0.91 1.23 1.10 1.60 1.58 1.60 1.58 1.62 1.77 1.30 1.30 1.30 1.40	Azimuth 147.80 156.50 157.70 171.10 171.90 175.40 165.40 163.70 165.40 163.70 165.40 163.70 163.70 163.70 163.70 163.70 163.70 163.70 163.70 163.70 163.70 163.70 163.70	DL Angle 0.66 1.11 0.64 0.15 0.87 0.84 0.01 0.17 0.17 0.82 0.80 0.80 1.20 0.18 0.48 0.48 0.48 0.48 0.79 0.89 0.80 0.80 0.80 0.80 0.80 0.80 0.8	Depth 3103 3103 3105 3226 3227 3285 3320 3350 3361 3413 3472 3503 3586 3686 3686 3748 3810 3902 3995	Deviation 1.02 1.15 1.36 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.17 1.18 1.19 1.10 1.	Azimuth 174.90 167.30 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00	DL Angle 0,96 0,14 0,42 0,58 0,66 0,40 0,82 0,31 0,54 0,79 0,33 0,23
MUD 6. BACK ROUND 30 Depth 538 566 602 633 664 695 727 787 787 817 844 876 907 936 907 1034 1066 1067 11128 11159 11159	Deviation GAS 30 Deviation 1.03 1.22 1.20 1.25 1.34 1.26 1.32 1.34 1.33 1.43 0.84 0.71 0.86 0.50 0.91 1.00 1.04 1.16	Azimuth 184.79 199.53 186.87 180.49 180.29 175.88 164.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57	DL Angle 0.19 0.76 0.17 0.21 0.68 0.29 0.39 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53	TO (8) 4234 4254 4254 4254 4254 4254 4254 4254	Deviation 0.69 0.75 0.73 0.84 0.51 0.85 0.65 0.61 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.18 1.30 1.75 1.70 1.70 1.61	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 157.60 157.60 158.00 156.00 156.00 156.00 156.00 156.00 156.00 158.40 164.20	DEVIA DE VIA DL Angle 1.35 0.39 0.47 0.83 1.13 0.29 0.65 1.23 1.04 0.43 1.04 0.43 1.05 0.59 0.83 0.54 1.59 0.83 0.59 0.50 0.39 1.12	BEFORE UNTS 30 30 30 30 30 Depth 2244 2275 2306 2337 2399 2429 2450 2492 2523 2554 2614 2672 2703 2734 2764 2826 2856	RVEYS Deviation 225 RVEYS Deviation 227 224 206 205 1,95 1,48 1,22 0,96 0,96 0,91 1,23 1,10 1,30 1,58 1,66 1,58 1,66 1,77 1,30 1,20 0,90	Azimuth 147.80 156.50 158.70 170.10 171.90 171.90 171.90 175.40 165.40 163.70 165.40 163.70 165.40 163.70 165.40 163.70 165.40 165.40 163.70 177.10 178.90 184.00 184.00 186.10	DL Angle 0.66 1.11 0.64 0.15 0.87 0.87 0.84 0.01 0.17 1.07 0.62 0.80 1.20 0.18 0.48 0.48 0.48 0.49 0.10 0.72 0.72 0.73	Depth 3103 3103 3105 3226 3227 3285 3320 3350 3361 3413 3472 3503 3586 3686 3686 3748 3810 3902 3995	Deviation 1.02 1.15 1.36 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.17 1.18 1.19 1.10 1.	Azimuth 174.90 167.30 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00	DL Angle 0,96 0,14 0,42 0,58 0,66 0,40 0,82 0,31 0,54 0,79 0,33 0,23
MLD G. BACK ROUND 30 Depth 538 566 602 633 664 695 757 757 787 814 876 9907 9916 9911 1066 1097 11159 11159 11159 11151	Deviation GAS DATA (Im. GAS) 30 Deviation 1.03 1.22 1.20 1.25 1.34 1.26 1.32 1.34 1.48 1.43 0.71 0.86 0.50 0.91 1.00 1.04 1.16 1.19 1.01	Azimuth 184.79 189.53 186.87 188.91 180.49 175.88 164.40 162.92 175.82 143.19 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51	DL Angle 0.19 0.76 0.17 0.21 0.68 0.29 0.39 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.62 1.48 2.30 0.51	TO (8) 4234 4254 4254 4254 4254 4254 4254 4254	Deviation 0.69 0.75 0.83 0.84 0.51 0.085 0.81 1.20 0.85 0.81 1.10 0.85 0.81 1.10 0	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 157.80 157.80 158.00 156.00 156.00 156.00 156.00 156.00 156.00 158.40 1	DEVIA DE VIA DL Angle 1.35 0.39 0.47 0.83 1.13 0.29 0.65 1.23 1.04 0.43 1.04 0.43 1.05 0.59 0.50 0.39 1.10 0.50 0.10 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50	BEFORE UNTS 30 30 30 30 30 Depth 2244 2275 2306 2337 2399 2429 2450 2492 2523 2554 2614 2672 2703 2734 2674 2672 2703 2734 2764 2826 2856 2857 2919	Deviation 227 2.24 2.06 2.05 1.95 1.48 1.22 0.96 0.96 1.58 1.68 1.82 1.77 1.30 1.50 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Azimuth 147.80 156.50 158.70 170.70 171.90 171.70 171.90 175.40 163.70 168.10 177.10 178.90 184.00 195.80 196.10 197.90 198.10 199.10 199.10 199.10 199.10	DL Angle	Depth 3103 3103 3105 3226 3227 3285 3320 3350 3361 3413 3472 3503 3586 3686 3686 3748 3810 3902 3995	Deviation 1.02 1.15 1.36 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.17 1.18 1.19 1.10 1.	Azimuth 174.90 167.30 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
MUD 6. BACK ROUND 30 Depth 538 538 566 602 633 664 695 727 787 787 844 876 907 936 907 1128 1159 1159 1159 1159 1159 1159 1159 115	Deviation GAS 30 Deviation 1.03 1.22 1.20 1.25 1.34 1.26 1.32 1.34 1.43 1.43 1.43 1.43 1.43 1.43 1.44 0.71 0.86 0.50 0.91 1.00 1.16 1.19 1.01 0.76 0.27 0.30 0.35	Azimuth 184.79 189.53 188.91 180.49 175.88 164.40 162.92 175.82 143.19 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75 203.90 173.03	DL Angle 0.19 0.76 0.36 0.36 0.36 0.59 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.62 1.48 2.30 0.51	Depth 1407 1433 1454 1575 1906 1937 2028 2050 2051 2152	BEFORE (B) 8 8 7 7 8 8 8 7 7 8 9 8 8 8 9 9 9 9 9 9	Azimuth 190.80 190.50 2.15 2.15 2.15 2.15 2.15 2.15 2.15 2.15	DEVIA DEVIA DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.09 0.65 1.23 1.04 0.43 1.06 0.59 0.83 0.54 1.59 0.50 0.39 1.105 0.26 1.03 0.36	BEFORE UNITS 30 30 30 30 30 30 30 3	RVEYS Deviation 225 RVEYS Deviation 227 224 206 205 1.95 1.95 1.90 1.00 1.00 1.00 1.00 1.00 1.00 1.00	Azimuth 147.80 156.50 157.60 163.20 170.10 171.20 170.60 163.70 157.40 165.40 1	DL Angle O.60 0.13 0.64 0.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.80 1.20 0.18 0.48 1.02 0.25 0.79 0.94 1.01 0.72 0.73 0.74	Depth 3103 3103 3105 3226 3227 3285 3320 3350 3361 3413 3472 3503 3586 3686 3686 3748 3810 3902 3995	Deviation 1.02 1.15 1.36 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.17 1.18 1.19 1.10 1.	Azimuth 174.90 167.30 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
MUD 6. BACK ROUND 30 Depth 558 558 566 602 633 664 695 727 787 817 844 876 907 907 908 971 1034 1096 1097 11128 11199 11221 1221 1221 1221	Deviation 9AS 30 Deviation 1.03 1.22 1.20 1.25 1.34 1.26 1.32 1.34 1.33 1.43 0.84 0.71 0.36 0.50 0.91 1.00 1.04 1.16 1.19 1.01 0.76 0.27	Azimuth 134.79 189.53 186.87 180.29 175.88 164.40 162.92 143.19 137.08 101.59 112.85 107.94 109.50 120.10 126.70 132.57 132.57 133.90	DL Angle 0.19 0.76 0.17 0.21 0.68 0.29 0.39 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.62 1.48 2.30 0.51	TO (8) 4234 4254 4254 4254 4254 4254 4254 4254	Deviation 0.69 0.75 0.83 0.84 0.51 0.085 0.81 1.20 0.85 0.81 1.10 0.85 0.81 1.10 0	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 157.80 157.80 158.00 156.00 156.00 156.00 156.00 156.00 156.00 158.40 1	DEVIA DE VIA DL Angle 1.35 0.39 0.47 0.83 1.13 0.29 0.65 1.23 1.04 0.43 1.04 0.43 1.05 0.59 0.50 0.39 1.10 0.50 0.10 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50	BEFORE UNTS 30 30 30 30 30 Depth 2244 2275 2306 2337 2399 2429 2450 2492 2523 2554 2614 2672 2703 2734 2674 2672 2703 2734 2764 2826 2856 2857 2919	Deviation 227 2.24 2.06 2.05 1.95 1.48 1.22 0.96 0.96 1.58 1.68 1.82 1.77 1.30 1.50 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Azimuth 147.80 156.50 158.70 170.70 171.90 171.70 171.90 175.40 163.70 168.10 177.10 178.90 184.00 195.80 196.10 197.90 198.10 199.10 199.10 199.10 199.10	DL Angle	Depth 3103 3103 3105 3226 3227 3285 3320 3350 3361 3413 3472 3503 3586 3686 3686 3748 3810 3902 3995	Deviation 1.02 1.15 1.36 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.17 1.18 1.19 1.10 1.	Azimuth 174.90 167.30 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00 185.00	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23

						P	UMP & C	RCULAT	ING DATA						
			LINER	STROKE	ASSUMED	PUMP		PUMP		CIRC	ZLATING DETA	ILS .		ANNULAR VE	LOCITY
MOD	-	i	SIZE	LENGTH	EFF	RATE	NATE VOLUMETRIC DATA SU		Standpipe Motor		HHP	DP	DC		
PUMPS	MAKE	MODEL	(in)	(in)	(%)	(spm)	(bbls/stk)	(bbls/min)	(gal/min)	(psi)	Differential	(Sq In)	(fl/min)	(f/min)	
NO. 1	National	7P50	6.25	7.75	95.00%	56	0.0736	3.92	164	320	no MM	3.09	95	203	
NO. 2															
NO. 3							L								
COMBINED											}				

WELL NAME Jensen 1-18 43-001 30 7/8 LOCATION DATA NOT THAT Sec 16 T-12S, R-10E 13 00 FOOTAGES GL KB 550 FNL 200 FWL 7569 7580 COUNTY, STATE Carbon County, Utah

EVERGREEN OPERATING, INC. DAILY DRILLING REPORT

RIG CONTACT INFORMATION:

OFFICE TRAILER / FAX: 970 942 7543

CONSULTANT HAND CELL: 303 913 1054

DOGHOUSE: 307 258 7315

PUSHER:

SPUD DATE 6AM DEPTH DATE 4333 9/9/20044 8/16/2004 24 HR FOOTAGE REPORT NO. 60 DAYS SINCE SPUD DRLG CONTRACTOR 24 Elenburg, Rig 12 API# CONSULTANT 43-007-30718 John C. Lamb

ACTIVITY AT REPORT TIME:

Tripping in hole

DAILY COST CUM COST AFE COSTS

\$ 15,197 \$ 769,185 \$ -

CH	RONOL OC	Y OF DAIL	Y OPERATIONS (06:00 - 06:00 HRS)	SLOW	PUMP RA	TE DATA:		STRIN	G WEIGHT INF	INFORMATION:		
ROM	то	HOURS	Activity:	Depth	SPM	Pressure	Eff BHA Wt 40,017	Rotating:	Slackoff:	Hoisting:		
(hrs)	(hrs)	(hrs)	4000	1			,	L.,, .		***		
06:00	07:00	1.00	Cut core #11 4273 - 4278									
07:00	08:30	1.50	Retrieve barrel, recovered 7.8' of 8', drop barrel									
08:30	10:30	2.00	Cut core #12 4278 - 4288									
10:30	11:15	0.75	Retrieve barrel, recovered 9.4' of 10', drop barrel									
11:15	11:45	0.50	Rig repair - replace swivel hydraulic hose			***						
11:45	13:15	1.50	Cut core #13 4288 - 4309									
13:15	14:15	1.00	Retrieve barrel, recovered 20.7' of 21', drop barrel									
14:15	16:45	2.50	Cut core #14 4309 - 4333				-	····				
16:45	17:30	0.75	Retrieve barrel, recovered 24' of 24'	· ·								
17:30	17:45	0.25	Circulate to clean hole									
17:45	21:45	4.00	Trip out of hole - lay down 5" drill pipe									
21:45	22:15	0.50	Rig repair - replace swivel hydraulic hose	1.91 11		arel assembl						
22:15	00:00	1.75	Trip out of hole - lay down balance of 5" drill pipe, 6 1/2	drill collars	and core b	allel assellibl	<u> </u>					
00:00	02:00	2.00	Change pipe rams			10.						
02:00	03:30	1.50	Test BOPE				· - 			,		
03:30	05:00	1.50	Trip in hole									
05:00	05:30	0.50	Slip drilling line									
05:30	06:00	0.50	Trip in hole									
			Notes on cores:						CEN			
			Core #13 contained 18' of more or less intact coal with	no rubblizat	ion			; j ;	man Sugar Com 3 18	Funny saw		
								D	EC 132	2004		
								- OIV OI	CHLIGAS	S MINING		
		-										
TOTAL	HOURS	24.00										

	DAILY	CUM
DESC.	(hrs)	(hrs)
Drill		287.75
Trip	7.75	57.50
Circulate	0.25	9.25
Rig Repair	1.00	31.50
Rig Service		6.25
Dev Survey		2.75
NU / ND		21.00
Cement		2.50
Run Casing		8.00
woc		
OH Logging		
Mix Mud		
MI & RU		6.00
Rat Hole		
Mouse Hole		
Fishing		
Other	2.00	4.50
Coring	11.00	38.00
Inspect BHA		
Cut drig line	0.50	1.75
Wash & Ream		1.25
Drill Cement		8.25
Test BOPE	1.50	6.50
woo		
PU/LD BHA		6.25
insp circ equip		3.50
TOTALS	24.00	502.50

	SUMMARY OF DAILY & CUMULATIVE CO		DAILY		CUM	AFE	
COST CODE	DESCRIPTION OF DAILY COSTS		(\$)		(\$)	(\$)	
2030.010	Land, Legal, Title, Survey, Arch, Damages, Permits, Signs						
2030.031	Dirtwork, Road, Location, Pits, Liner						
2030.019	Contract Drilling 9480 / day 392.5 / h cond 5071 26,000 mob sfc 36791	\$_	9,480	_	292,472		
2032.001	Water			\$	6,712		
2032.013	Drill Bits, Stabilizers, Reamers	<u> </u>		\$	42,500		
2031.046	Cementing and Services	<u> </u>		\$	26,636		
2030.053	Coring and Analysis	\$	(4,112)	\$_	69,378		
2030.052	Logging						
2030.054	Mud Logging cum 3 days desorp techs @ 1400/day	\$	4,950	\$	12,450		
2030.037	Rental Equipment	\$	1,305	\$	38,270		
2030.028	Transportation			\$	15,434		
2032.004	Mud and Chemicals	\$	1,974	\$	30,635		
	Directional Services, Mud Motors	_		\$	106,512		
	Intermediate casing	_		\$	70,415		
2030.035	Contract Labor	\$	800	\$	9,010		
2030.022	Engineering / Supervision	\$	800	\$	19,200		
2030.099	Intangible Miscellaneous and Contingencies						
2040.001	Surface Casing	ļ		\$	17,790		
2040.004	Production Casing	<u> </u>		<u> </u>			
1011.000	Float Equipment, Shoes, Centralizers	L		\$	1,800		
1041.000	Wellhead Equipment			\$	9,971		
1073.000	Bottom Hole Pump / Gas Lift / Other			L.			
1104.000	Drivehead, Engine / Motor and Hydraulic Pump / Electric Unit	_					
2040.052 / 2040.055	Valves and Fittings, Small / Large	<u>L</u> .		_			
2040.067	Other Surface Equipment	<u> </u>					
2040.099	Tangible Miscellaneous and Contingencies						
	TOTAL COSTS	\$	15,197	5	769,185	\$	

Report #	24	Date:	09/09/04		DA	ILY DR	ILLING	REPO	RT						Page 2		
		Julio:	Well Na	me:		Je	nsen 1-18					-			100		
		- 1.3			. —	DEPTH	DEPTH	FOOTAGE	CUM BIT			г —	BIT		T GRADING		
BIT	SIZE:			SFRIAL	JETS	DEPTH	OUT	DRILLED	HOURS	ROP	WOB	RPM	TORQUE				
NO.	(in)	MFG	TYPE	NO.	(32/32/32)	(A)	(A)	(R)	(hrs)	(ft/hr)	(#7±)	MTR/TBL	(R - Hos) 2100 - 2900		Seals Gge Dull Othe		
1	12 1/4	Security	XL18N	754840	14 / 14 / 14 / 16 18 / 18 / 18	494	1,799	1,305 899	102.75 83.25	12.7	36 - 43 35 - 40	45 / 60 45 / 45-70	1400 - 2200		FEF 1/8 BT ROP		
3	12 1/4 12 1/4	Security Smith	XL43 F4	10408516 MT6085	18 / 18 / 18	1,799 2,698	2,698 3,522	824	83.25	9.9	35 - 40	45 / 60	1600 - 2550	8 8 WT ALL	EEE1/2 RG TORQ		
4	7 7/8	Smith	F57YOD	MT2530	12 / 13 / 12	3,522	4,156	634	68,50	9.3 5.2	23 - 28 6 - 10	55 - 60 45 - 80	1800 - 2400 2500 - 3200		LEEE in CP rs on inside gauge		
CB1	7 7/8	Corion	CMF573 CMR36	 		4,156 4,264	4,264 4,333	108	20.75 9.25	7.5	5	60 - 75	2600	23 broken cutter			
CB2 5	7 7/8 7 7/8	Corian RTC	HP61HK	PO9116	13 / 13 / 13	4,333		-4,333		#DIV/0!							
COMM	MENTS	8#s 1,2&3 with s	hock sub, mud m	otor and direc	tional tools; Bit 4	& 5 with shock	k sub and no	mud motor									
RENT	AL EQUIP	MENT								CASING	ATA	1					
RENTAL	DAILY	CUM						DRIFTID	EXTERNAL COLLAPSE	INTERNAL YNELD	CAPACITY	LENGTH	TOP SET AT	BOTTOM SET AT			
ITEM	COSTS	COS15		SIZE	WEIGHT	GRADE	CONN	DRIFTID	(psi)	(psi)	(bbleft)	(R)	(ft)	(R KB)	agili, yalisa		
Living Qtrs	\$ 315	\$ 7,920		30"	NA	NA						40.00	0.00	40.00 498.00			
rac Tank	\$ 45			13 3/8"	54.5	J55	ST&C	12. 45 9 7.796	1,130 2,530	2,730 3,930	0.15450	500.00 3,545.00	2,00 0.00	3,520.00			
orklift ortarohn	\$ 60 \$ 20	\$ 1,170 \$ 480		8 5/8"	32	J55	ST&C	7.790	2,330	3,000		-,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					
ud Trailer	\$ 50	\$ 1,200			· · · · · · ·						101.1/			The training to the same of	- N		
ud Cleaner	\$ 375	\$ 10,000				F 1		В	ОНМОТТО	MAXIMUM	MINIMUM	Γ	i i	· ·			
DR dadalar	\$ 100 \$ 90	\$ 2,400 \$ 1,970	1 2 24					THRE	AD SIZE	0.D	I,D.	LENGTH		HRS SINCE			
utodniler U mud çinr		\$ 975	DE	SCRIPTION OF	ВНА	PROV		вох	PIN	(17)	(In)	(R)	HOURS RUN	INSPECTION	<u> </u>		
nil collans		\$ 5,585		Bit		R*		4 1/2 R	4 1/2 R 4 1/2 XH	7.875 6.250	2.500	1.00 2.90	78.50 78.50	78.50 78.50			
nock Sub	\$ 250	\$ 5,500		Bit sub riffith Shock	Sub	Sp	idle	4 1/2 KH	4 1/2 XH	6.500	6.375	10.03	78.50	78.50			
ner ner			17 -	6 1/2" Drill (Collars	R	ig	4 1/2 XH	4 1/2 XH	6.500	2.313	525.85	78.50	78.50			
ner			2	- 4 1/2" HW	DP	R	ig	4 1/2 XH	4 1/2 XH	4.500	2.875	61.78	78.50	78.50	-		
ner .	ļ		-	-													
ner ner																	
ner												ļ 			· · · · · · · · · · · · · · · · · · ·		
TOTALS	\$ 1,305	\$ 38,270	L												<u></u>		
							DRILLIN	G MUD R	EPORT CAKE	The State	SAND	rae.					
SAMPLE DEPTH	TIME	MUD WT.	PUNNEL VISCOSITY	PV/YP	ка	GEL STRENGTH	API	CALCIUM	THICKNESS	501106	CONTENT	рН	CHLORIDES	ALKAUNITY	LCM		
(R)	(hh:mm)	(PPg)	(sec/qt)	1	(%)	(Ib/100 ft2)	(mi/30 min)	(ppm) 30	(/32 in) NC	(% vol) 0.0	(% vol)	8.0	(ppm) 4,000	0 / 4.4	lb/gal Bicarbs 5368 mg / L		
4,325	16:00	8,40	27	1/0		0/0	NC	30	NC	0.0	-		4,000				
				<u>T</u>									l				
	F 3 1,751		TOPEL - T		477.4 448.4	DA	ILY MUD	COST & I	NVENTOR	Y							
739.5	-1100								SOLKWICK	PAC-R	PHPA	CEDAR	TRUCKING		TOTAL COSTS		
			BARITÉ (sx)	QUICK GEL	CAUSTIC (ex.)	LIME (sx)	SODA ASH	UNIDRILL (6×)	(sx)	(\$X)	(gal)	(=x)	(5)	ļ.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(5)		
NIT COST																	
TARTING INV			120														
MENTORY RE				+													
NOING INVEN												ļ			1,97		
AILY MUD CO				-				-							28,66		
UMULATIVE N	MULATIVE COST													Ĺ	30,63		
	00 K / 10 KKK	inia.		19.7 1 4	taran makilian	20222444 : 1 E	MUDIC	GGER R	EPORT	1888 - 1877 S		Terror	E-130988				
MUD	GAS DATA (In L	inits)	SHOW INTE	RVAL	RATE (F PENETRATI			SHOW GAS DA		Į		D.L. Dive	24001 Caatlag	10 2110		
		TRIP	FROM	70	BEFORE	DURING	AFTER	BEFORE	DURING	AFTER	Formation	lops:		2100' Castleg 3420', Aberde			
BACK	CONN																
GROUND	GAS	GAS.	(ft) 4208	4306	(N) 10-14	2-3	6-8	65	1006	150	Sample per	centages:		en Ss; strong odor on fresh breaks			
40.00	HORSES NO. 127	GAS.	(h) 4208	4306	(N) 10-14	2-3	6-8	65	1006	150	Core Descrip	otion:			r on fresh breaks		
GROUND	HORSES NO. 127	GAS	(h) 4208	4306	(N) 10-14	2-3	6-8	65	1006	150	Core Descrip with possi	oton: ble very lig	ht brown o	Ss: strong odo il staining, ping	r on fresh breaks		
GROUND	HORSES NO. 127	GAS	(ħ) 4208	4306	(N) 10-14	2-3	6-8	65	1006	150	Core Descrip with possi	otion:	ht brown o		r on fresh breaks		
GROUND	HORSES NO. 127	GAS	(h) 4208	4306	10-14	2-3				150	Core Descrip with possi	oton: ble very lig	ht brown o		r on fresh breaks		
GROUND. 50-75	GAS	GAS					DEVIAT	ION SU	RVEYS		Core Descrip with possi fluorescen	oton: ible very lig nce, bright	ht brown o yellow cut	il staining, pinp	r on fresh breaks oint yellow		
GROUND 50-75	GAS	Azimuth	DL Angle	Depth	Deviation	Azimuth	DEVIAT	ION SU	RVEYS Deviation	Azimuth	Core Descrip with possi fluorescen	oton: ble very lig nce, bright Depth	ht brown of yellow cut		r on fresh breaks		
50-75 50-75 Depth 538	Deviation 1.03	184.79					DEVIAT	ION SU	RVEYS		Core Descrip with possi fluorescen	oton: ible very lig nce, bright	ht brown o yellow cut	il staining, pinp Azimuth 174.90 175.60	r on fresh breaks oint yellow DL Angle 0.96 0.14		
Depth 538 566 602	Deviation 1.03 1.22 1.20	184.79 189.53 186.87	DL Angle 0.19 0.76 0.17	Depth 1407 1438 1468	Deviation 0.69 0.75 0.73	Azimuth 190.80 190.50 201.30	DEVIAT DL Angle 1.35 0.39 0.47	Depth 2244 2275 2306	RVEYS Deviation 2.27 2.24 2.06	Azimuth 147.80 156.50 158.70	DL Angle 0.66 1.11 0.64	Depth 3103 3133 3165	Deviation 1.06 1.02 1.15	Azimuth 174.90 175.60 174.00	r on fresh breaks oint yellow DL Angle 0.96 0.14 0.42		
Depth 538 566 602 633	Deviation 1.03 1.22 1.20	184.79 189.53 186.87 188.91	DL Angle 0.19 0.76 0.17 0.21	Depth 1407 1438 1468 1499	Deviation 0.69 0.75 0.73	Azimuth 190.80 190.50 201.30 218.50	DEVIAT DL Angle 1.35 0.39 0.47 0.83	Depth 2244 2275 2306 2337	PVEYS Deviation 2.27 2.24 2.06 2.05	Azimuth 147.80 150.50 158.70 157.60	DL Angle 0.66 1.11 0.64 0.13	Depth 3103 3133 3165 3196	Deviation 1.06 1.02 1.15 1.26	A≢muth 174.90 175.60 174.00 167.30	DL Angle 0.96 0.14 0.42 0.58		
Depth 538 566 602 633 664	Deviation 1.03 1.22 1.20 1.25 1.34	184.79 189.53 186.87 188.91 180.49	DL Angle 0.19 0.76 0.17	Depth 1407 1438 1468 1499 1532	Deviation 0.69 0.75 0.73 0.84	Azimuth 190.80 190.50 201.30 218.50 206.70	DEVIAT DL Angle 1.35 0.39 0.47	Depth 2244 2275 2306	RVEYS Deviation 2.27 2.24 2.06	Azimuth 147.80 156.50 158.70	DL Angle 0.66 1.11 0.64	Depth 3103 3133 3165	Deviation 1.06 1.02 1.15	Azimuth 174.90 175.60 174.00	DL Angle 0.96 0.14 0.42		
Depth 538 566 602 633	Deviation 1.03 1.22 1.20	184.79 189.53 186.87 188.91	DL Angle 0.19 0.76 0.17 0.21 0.65 0.26 0.36	Depth 1407 1438 1468 1499 1532 1563 1595	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20	DEVIAT DL Angle 1.35 0.39 0.47 0.63 1.08 1.13	Depth 2244 2275 2306 2337 2367 2399 2429	RVEYS Deviation 2.27 2.24 2.06 2.05 1.48 1.22	Azimuth 147.80 156.50 158.70 157.60 163.20 170.70 170.10	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87	Depth 3103 3185 3196 3226 3257 3288	Deviation 1.06 1.02 1.15 1.26 1.45 1.38 1.40	Azimuth 174.90 175.60 174.00 187.30 189.60 165.50	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82		
Depth 538 664 695 727 757	Deviation 1.03 1.22 1.20 1.25 1.34 1.26 1.32 1.34	184.79 189.53 186.87 188.91 180.49 180.29 175.88 164.40	DL Angle 0.19 0.76 0.17 0.21 0.65 0.26 0.36 0.89	Depth 1407 1438 1468 1499 1532 1583 1595 1626	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43	Depth 2244 2275 2306 2337 2367 2399 2429 2460	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.96	Asimuth 147.80 156.50 158.70 157.60 163.20 170.70 170.10 171.70	DL Angle 0.66 1.11 0.64 0.73 1.62 0.87	Depth 3103 3196 3226 3226 3220	Deviation 1.06 1.02 1.15 1.26 1.45 1.38 1.40 1.40	Azimuth 174.90 177.60 167.30 169.60 165.50 155.00	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31		
Depth 538 566 602 633 664 695 727 787	Deviation 1.03 1.22 1.20 1.25 1.34 1.36 1.32 1.34 1.33	184.79 189.53 186.87 188.91 180.49 180.29 175.88 164.40 162.92	DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.39	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 196.70	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29	Depth 2244 2275 2306 2337 2367 2399 2429 2460 2492	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.96 0.96	Azimuth 147.80 155.50 158.70 157.60 163.20 170.70 170.170 171.190	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87	Depth 3103 3185 3196 3226 3257 3288	Deviation 1.06 1.02 1.15 1.26 1.45 1.38 1.40	Azimuth 174.90 175.60 174.00 187.30 189.60 165.50	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82		
Depth 538 664 695 727 757	Deviation 1.03 1.22 1.20 1.25 1.34 1.33 1.48 1.43	184.79 189.53 186.87 188.91 180.49 180.29 175.88 164.40 162.92 156.82 143.19	DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.68 1.29	Depth 1407 1438 1468 1499 1532 1595 1626 1657 1688 1720	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 1.20 1.00 0.88	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 196.70 202.10 202.10 179.00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23	Depth 2244 2275 2306 2337 2367 2399 2429 2460 2492 2523 2553	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.98 0.98 0.99 1.23	Azimuth 147.80 156.50 158.70 157.60 163.20 170.70 170.10 171.70 171.90 171.90 171.90	DL Angle 0.66 1.11 0.84 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07	Depth. 3103 3185 3196 3226 3226 3220 3350 3381 3413	Deviation 1.06 1.02 1.15 1.26 1.45 1.38 1.40 1.36 1.12 1.19 1.19	Azimuth 174.90 175.60 1774.00 169.60 1685.50 159.00 159.00 159.00 159.00 159.00	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33		
Depth 538 566 602 633 664 695 727 787 817 844 876	Deviation 1.03 1.22 1.20 1.25 1.34 1.34 1.33 1.48 1.43 0.64	184.79 189.53 186.67 188.91 180.29 175.88 164.40 162.92 156.82 143.19	DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.39 0.12 0.68 1.29	Depth 1407 1438 1468 1493 1552 1563 1595 1626 1657 1688 1720 1751	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 1.20 1.00 0.88 0.84	Azimuth 190.80 190.50 201.30 218.50 208.70 194.00 187.20 196.70 202.10 179.00 179.00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04	Depth 2244 2275 2306 2337 2367 2429 2460 2492 2553 2584	RVEYS Deviation 2 27 2 24 2 08 2 05 1 95 1 48 1 22 0 96 0 96 0 91 1 23 1 10	Azimuth 147.80 156.50 158.70 158.70 170.70 170.10 171.70 171.70 171.20 170.80 163.70	DL Angle 0.66 1.11 0.64 0.162 0.87 0.01 0.17 1.07	Depth 3103 3133 3165 3226 3257 3288 3320 3350 3341 3443	Deviation 1.08 1.02 1.15 1.28 1.45 1.33 1.40 1.36 1.12 1.09 1.19	Azimuth 174.90 175.60 174.00 167.30 169.60 185.50 155.00 152.50 154.50 159.80 169.80	DL Angle 0.96 0.14 0.42 0.59 0.66 0.40 0.62 0.31 0.54 0.79 0.33 0.23		
Depth 50-75 50-75 50-75 50-75 50-75 50-75 50-75 50-75 50-75 70-75 70-75 70-75 70-75 70-75 70-75 817 844 876 907	Deviation 1.03 1.22 1.20 1.25 1.34 1.26 1.32 1.34 1.43 1.43 1.43 0.84 0.71	184.79 189.53 186.87 188.91 180.29 175.88 164.40 162.92 156.82 143.19 137.08 130.59	DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.68 1.29	Depth 1407 1438 1468 1499 1532 1595 1626 1657 1688 1720	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 196.70 202.10 202.10 179.00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23	Depth 2244 2275 2306 2337 2367 2399 2429 2460 2492 2523 2553	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.98 0.98 0.99 1.23	Azimuth 147.80 156.50 158.70 157.60 163.20 170.70 170.10 171.70 171.90 171.90 171.90	DL Angle 0.66 1.11 0.84 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07	Depth. 3103 3185 3196 3226 3226 3220 3350 3381 3413	Deviation 1.06 1.02 1.15 1.26 1.45 1.38 1.40 1.36 1.12 1.19 1.19	Azimuth 174.90 175.60 1774.00 169.60 1685.50 159.00 159.00 159.00 159.00 159.00	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33		
Depth 538 566 602 633 664 695 727 757 817 817 844 876 907 936 971	Deviation 1.03 1.22 1.20 1.26 1.34 1.34 1.33 1.48 1.33 1.49 0.64 0.71 0.86 0.50	184.79 189.53 186.87 186.87 180.91 150.49 180.29 175.88 164.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94	DL Angle 0.19 0.76 0.17 0.21 0.65 0.26 0.36 0.12 0.68 1.29 1.88 0.51 0.95	Depth 1407 1438 1468 1499 1532 1593 1595 1626 1637 1688 1720 1751 1752 1813 1813	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05	Azimuth 190,80 190,50 201,30 218,50 206,70 194,00 187,20 202,10 199,70 202,10 179,00 157,60 149,00 149,00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 0.43 1.06 0.59	Depth 2244 2275 2306 2337 2367 2399 2429 2460 2492 2523 2584 2614 2644 2672	RVEYS Deviation 2.27 2.24 2.08 2.05 1.95 1.48 1.22 0.96 0.96 0.91 1.23 1.10 1.30 1.60 1.55	Azimuth 147.80 156.50 158.70 157.60 163.20 170.70 171.70 171.70 171.90 171.20 170.50 163.70 157.40 163.70	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87 0.01 0.17 1.07 0.62 0.80 1.80 1.80 1.80 1.80 1.80 1.80 1.80	Depth 3103 3193 3195 3290 3381 3443 3472 3503 3596	Deviation 1.06 1.02 1.15 1.26 1.45 1.38 1.40 1.36 1.12 1.09 1.16 1.34 1.34 1.50 2.00	Azimuth 174.90 175.60 174.00 167.30 169.60 185.50 155.00 152.50 154.50 159.80 169.80	DL Angle 0.96 0.14 0.42 0.58 0.68 0.40 0.62 0.31 0.54 0.79 0.33 0.23		
Depth 538 602 633 664 695 727 757 817 844 876 907 936 911 1034	Deviation 1.03 1.22 1.20 1.25 1.34 1.32 1.34 1.45 1.43 0.64 0.71 0.86 0.50 0.91	184.79 189.53 186.87 186.87 180.49 180.29 175.88 164.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50	DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.39 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65	Depth 1407 1438 1488 1499 1532 1583 1595 1626 1771 1638 1720 1751 1813 1813	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 196.70 202.10 179.90 157.60 164.00 149.90 158.00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 1.23 1.04 0.43 1.06 0.59 0.83	Depth 2244 2275 2306 2337 2367 2399 2429 2460 2492 2523 2553 2564 2614 2644 2672 2703	RVEYS Deviation 2.27 2.24 2.08 2.05 1.95 1.48 1.22 0.96 0.91 1.23 1.10 1.30 1.60 1.55	Azimuth 147.80 156.50 156.50 157.60 163.20 170.70 170.70 171.70 171.90 171.90 171.90 163.70 163.70 163.70 163.70 163.70	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.80 1.20 0.18	Depth 3103 3196 3226 3226 3320 3381 3443 3443 3596 3656	Deviation 1.06 1.05 1.15 1.26 1.40 1.30 1.10 1.10 1.30 1.10 1.10 1.30 1.3	Azimuth 174.90 175.60 174.00 167.30 169.60 185.50 155.00 152.50 154.50 159.80 169.80	DL Angle 0.96 0.14 0.42 0.58 0.68 0.40 0.62 0.31 0.54 0.79 0.33 0.23		
Depth 50-75 538 566 602 633 664 695 727 757 787 817 844 876 907 936 971 1034	Deviation 1.03 1.22 1.20 1.25 1.34 1.26 1.32 1.34 1.06 1.07 1.00 1.00 1.00 1.00 1.00	184.79 189.53 186.87 188.91 180.49 180.29 175.88 184.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94	DL Angle 0.19 0.76 0.17 0.21 0.65 0.26 0.36 0.12 0.68 1.29 1.88 0.51 0.95	Depth 1407 1438 1449 1532 1563 1595 1626 1557 1688 1720 1751 1762 1813 1844 1875 1998	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.105	Azimuth 190,80 190,50 201,30 218,50 206,70 194,00 187,20 202,10 199,70 202,10 179,00 157,60 149,00 149,00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 0.43 1.06 0.59 0.83	Depth 2244 2275 2306 2337 2367 2399 2429 2460 2492 2523 2584 2614 2644 2672	RVEYS Deviation 2.27 2.24 2.08 2.05 1.95 1.48 1.22 0.96 0.96 0.91 1.23 1.10 1.30 1.60 1.55	Azimuth 147.80 156.50 158.70 157.60 163.20 170.70 171.70 171.70 171.90 171.20 170.50 163.70 157.40 163.70	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87 0.01 0.17 1.07 0.62 0.80 1.80 1.80 1.80 1.80 1.80 1.80 1.80	Depth 3103 3193 3195 3290 3381 3443 3472 3503 3596	Deviation 1.06 1.02 1.15 1.26 1.45 1.38 1.40 1.36 1.12 1.09 1.16 1.34 1.34 1.50 2.00	Azimuth 174.90 175.60 174.00 167.30 169.60 185.50 155.00 152.50 154.50 159.80 169.80	DL Angle 0.96 0.14 0.42 0.58 0.68 0.40 0.62 0.31 0.54 0.79 0.33 0.23		
Depth 538 664 695 727 757 817 844 876 907 936 931 1034	Deviation 1.03 1.22 1.20 1.25 1.34 1.32 1.34 1.45 1.43 0.64 0.71 0.86 0.50 0.91	184.79 189.53 186.87 186.87 180.49 180.29 175.88 164.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50	DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40	Depth 1407 1438 1488 1499 1532 1583 1595 1626 1771 1638 1720 1751 1813 1813	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 197.20 196.70 202.10 202.10 179.00 157.60 164.00 149.00 155.00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 1.23 1.04 0.43 1.06 0.59 0.83	Dapth 2244 2275 2306 2397 2429 2460 2492 2523 2553 2584 2614 2644 2672 2703 2734	RVEYS Deviation 2.27 2.24 2.08 2.05 1.95 1.48 1.22 0.96 0.91 1.23 1.10 1.30 1.60 1.55 1.66 1.82 1.77 1.30	Azimuth 147.80 156.50 156.50 157.60 163.20 170.70 170.70 171.70 171.90 171.90 171.90 163.70 163.70 163.70 163.70 163.70 163.70 163.70 163.70 163.70 163.70 163.70 163.70	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.80 1.20 0.18 0.48 0.48 1.02 0.25 0.79	Depth 3103 3196 3226 3226 3290 3381 3413 3413 3472 3503 3566 3686 3748 3800 3800 3800 3800 3800 3800 3800 38	Deviation 1.08 1.02 1.15 1.26 1.45 1.38 1.40 1.40 1.16 1.19 1.19 1.19 1.19 1.10 1.10 1.10 1.10	Azimuth 174.90 175.60 174.00 167.30 169.60 185.50 155.00 152.50 154.50 159.80 169.80	DL Angle 0.96 0.14 0.42 0.59 0.66 0.40 0.62 0.31 0.54 0.79 0.33 0.23		
Depth 538 566 602 633 664 695 727 757 787 817 844 876 907 936 971 1034 1066 1097 1128	Deviation 1.03 1.22 1.20 1.25 1.34 1.26 1.32 1.34 1.33 1.48 1.43 0.64 0.71 0.86 0.50 0.91 1.00 1.04 1.16 1.19	184.79 189.53 186.87 188.91 150.49 175.88 164.40 162.92 175.88 164.40 162.92 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30	DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.39 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.65 0.62 0.40 0.53	Depth 1407 1438 1489 1532 1563 1595 1626 1557 1688 1720 1751 1762 1813 1844 1875 1906 1935 1967	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.105 1.18 1.30 1.75 1.770	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 196.70 202.10 202.10 179.00 157.60 164.00 155.00 156.00 155.00 161.00 155.40	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.23 1.04 0.43 1.06 0.59 0.83 0.54 1.59 0.50 0.39	Depth 2244 2275 2306 2337 2367 2397 2429 2460 2492 2523 2553 2584 2614 2644 2672 2703 2734 2764 2326 2356 2856	RVEYS Deviation 2.27 2.24 2.06 1.95 1.49 1.22 0.96 0.96 0.91 1.23 1.10 1.30 1.60 1.58 1.66 1.82 1.77 1.30 1.20	Azimuth 147.80 156.50 157.60 163.20 170.70 171.70 171.70 171.90 175.40 165.40 163.70 165.40 163.70 165.40 163.70 168.10	DL Angle 0.66 1.11 0.64 0.13 0.73 0.84 0.01 0.17 1.07 0.62 0.80 1.20 0.18 0.48 1.02 0.25 0.79 0.94	Depth 3103 3103 3133 3226 3250 3350 3350 3360 3413 3443 3503 3596 3748 3810 3996	Deviation 1.08 1.02 1.15 1.26 1.45 1.33 1.40 1.16 1.16 1.17 1.09 1.16 1.34 1.35 1.30 1.30 1.30 1.30 1.30 1.30 1.30 1.30	Azimuth 174.90 175.60 174.00 167.30 169.60 185.50 155.00 152.50 154.50 159.80 169.80	DL Angle 0.96 0.14 0.42 0.58 0.68 0.40 0.62 0.31 0.54 0.79 0.33 0.23		
Depth 538 566 602 633 664 695 727 787 817 844 376 907 1034 1036 1097 1128 1159	Deviation 1.03 1.22 1.20 1.25 1.34 1.26 1.32 1.33 1.49 1.43 0.84 0.71 0.36 0.50 0.91 1.00 1.04 1.16 1.19 1.01	184.79 189.53 186.87 188.91 150.49 180.29 175.88 164.40 162.92 156.82 143.19 137.03 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51	DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.89 0.12 0.68 1.29 1.38 0.51 0.95 1.04 0.65 0.62 0.40 0.53	Depth: 1407 1438 1468 1499 1532 1563 1595 1626 1557 1688 1770 1781 1844 1875 1906 1935	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.18 1.30 1.75 1.70 1.661	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 196.70 202.10 202.10 179.00 157.60 164.00 145.00 158.00 165.00 161.00 151.00 151.00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 0.43 1.06 0.59 0.83 0.54 1.59 0.50 0.39	Depth 2244 2275 2306 2337 2367 2399 2429 2460 2492 2523 2553 2584 2614 2672 2703 2734 2764 2826 2887	RVEYS Deviation 2.27 2.24 2.08 2.05 1.95 1.48 1.22 0.96 0.91 1.23 1.10 1.30 1.55 1.66 1.82 1.77 1.30 1.20 0.90	Azimuth 147.80 156.50 158.70 157.60 163.20 170.70 171.90 170.10 163.70 163.70 163.70 163.70 163.70 163.70 165.40 163.70 165.40 163.70 177.10 178.90 184.00 194.00 194.00	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.80 1.20 0.18 0.48 1.02 0.25 0.79	Depth 3103 3196 3226 3226 3290 3381 3413 3413 3472 3503 3566 3686 3748 3800 3800 3800 3800 3800 3800 3800 38	Deviation 1.08 1.02 1.15 1.26 1.45 1.38 1.40 1.40 1.16 1.19 1.19 1.19 1.19 1.10 1.10 1.10 1.10	Azimuth 174.90 175.60 174.00 167.30 169.60 185.50 155.00 152.50 154.50 159.80 169.80	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23		
Depth 538 566 602 633 664 695 727 757 787 817 844 876 907 936 971 1034 1066 1097 1128	Deviation 1.03 1.22 1.20 1.25 1.34 1.26 1.32 1.34 1.33 1.48 1.43 0.64 0.71 0.86 0.50 0.91 1.00 1.04 1.16 1.19	184.79 189.53 186.87 188.91 150.49 175.88 164.40 162.92 175.88 164.40 162.92 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30	DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.39 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.65 0.62 0.40 0.53	Depth 1407 1438 1489 1532 1563 1595 1626 1557 1688 1720 1751 1762 1813 1844 1875 1906 1935 1967	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.105 1.18 1.30 1.75 1.770	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 196.70 202.10 202.10 179.00 157.60 164.00 155.00 156.00 155.00 161.00 155.40	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.23 1.04 0.43 1.06 0.59 0.83 0.54 1.59 0.50 0.39	Depth 2244 2275 2306 2337 2367 2397 2429 2460 2492 2523 2553 2584 2614 2644 2672 2703 2734 2764 2326 2356 2856	RVEYS Deviation 2.27 2.24 2.06 1.95 1.49 1.22 0.96 0.96 0.91 1.23 1.10 1.30 1.60 1.58 1.66 1.82 1.77 1.30 1.20	Azimuth 147.80 156.50 157.60 163.20 170.70 171.70 171.70 171.90 175.40 165.40 163.70 165.40 163.70 165.40 163.70 168.10	DL Angle 0.66 1.11 0.64 0.63 1.07 0.84 0.01 0.17 1.07 0.62 0.80 1.20 0.18 0.48 1.02 0.25 0.79 0.94 1.01 0.72 0.78	Depth 3103 3103 3133 3226 3250 3350 3350 3360 3413 3443 3503 3596 3748 3810 3996	Deviation 1.08 1.02 1.15 1.26 1.45 1.33 1.40 1.16 1.16 1.17 1.09 1.16 1.34 1.35 1.30 1.30 1.30 1.30 1.30 1.30 1.30 1.30	Azimuth 174.90 175.60 174.00 167.30 169.60 185.50 155.00 152.50 154.50 159.80 169.80	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23		
Depth 538 566 602 633 664 695 727 787 817 817 1036 1097 1128 1191 1221 1221 1221	Deviation 1.03 1.22 1.20 1.25 1.34 1.26 1.32 1.33 1.43 0.84 0.71 0.86 0.50 0.91 1.00 1.04 1.16 1.19 1.01 0.76 0.27	184.79 189.53 186.87 188.91 180.49 180.29 175.88 164.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75 203.90	DL Angle 0.19 0.76 0.17 0.21 0.65 0.26 0.36 0.89 0.12 0.68 1.29 1.38 0.51 0.95 1.04 0.65 0.65 0.65 0.62 0.40 0.53 0.62 1.48 2.30 0.51	Depth. 1407 1438 1448 1499 1532 1553 1595 1626 1557 1688 1720 1751 1782 1813 1344 1875 1906 1935 1967 2028 2060 2091 2120	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 1.12 1.05 1.18 1.30 1.75 1.70 1.81 1.91 1.88 1.95 1.74	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 196.70 202.10 202.10 179.00 157.60 149.00 158.00 149.00 158.00 158.00 158.00 158.00 158.00 158.00 158.00 158.00 158.00 158.00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 0.59 0.53 0.54 1.59 0.50 0.39 1.12 1.05 0.26	Depth 2244 2275 2306 2397 23967 23967 2396 2429 2460 2492 2523 2553 2584 2614 2672 2703 2734 2764 2826 2887 2919 2981	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.96 0.96 0.91 1.23 1.10 1.30 1.60 1.55 1.66 1.52 1.77 1.30 1.20 0.90 0.90 0.90 0.90	Azimuth 147.80 156.50 158.70 157.60 163.20 170.70 171.90 171.70 163.70 163.70 163.70 163.70 165.40 163.70 165.40 163.70 165.40 163.70 178.90 184.00 199.00 184.00 189.00 184.00 184.00 189.00 184.00 1	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.80 1.20 0.18 0.48 0.02 0.19 0.19 0.25 0.79 0.94	Depth 3103 3103 3133 3226 3250 3350 3350 3360 3413 3443 3503 3596 3748 3810 3996	Deviation 1.08 1.02 1.15 1.26 1.45 1.33 1.40 1.16 1.16 1.17 1.09 1.16 1.34 1.35 1.30 1.30 1.30 1.30 1.30 1.30 1.30 1.30	Azimuth 174.90 175.60 174.00 167.30 169.60 185.50 155.00 152.50 154.50 159.80 169.80	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23		
Depth 538 566 602 633 664 695 727 757 787 817 844 876 907 936 971 1034 1066 1097 1128 1159 1191 1221	Deviation 1.03 1.22 1.20 1.25 1.34 1.26 1.32 1.34 1.33 1.48 1.43 0.64 0.71 0.86 0.50 0.91 1.00 1.04 1.16 1.19 1.01 0.76 0.27	184.79 189.53 186.87 188.91 150.49 175.85 164.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75	DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.39 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.65 0.62 0.40 0.53 0.33 0.62 1.44 1.43	Depth 1407 1438 1468 1499 1532 1583 1595 1626 1657 1638 1720 1751 1813 1844 1875 1906 1935 1997 2028 2080 2091	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.18 1.30 1.75 1.70 1.61 1.91 1.88	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 196.70 202.10 202.10 179.00 157.60 164.00 155.00 165.00 165.00 155.40 164.20 154.10 155.40	DEVIAT DL Angle 1.35 0.39 0.47 0.53 1.08 1.13 0.29 0.43 1.23 1.04 0.55 1.23 1.06 0.59 0.83 0.54 1.59 0.50 0.39 1.12 1.05 0.26	Depth 2244 2275 2367 2397 2429 2460 2492 2523 2553 2584 2614 2644 2672 2703 2734 2764 2826 2856 2887 2919 2951	RVEYS Deviation 2.27 2.24 2.08 2.05 1.95 1.48 1.22 0.96 0.91 1.23 1.10 1.30 1.60 1.53 1.66 1.82 1.77 1.30 1.00 1.00 1.00 1.00 1.00 1.00 1.00	Azimuth 147.80 155.50 155.50 163.20 170.70 171.70 171.70 171.90 175.60 163.70 165.40 165.40 165.40 168.10 177.10 178.90 184.00 196.10 191.00 205.80 205.40	DL Angle 0.66 1.11 0.64 0.63 1.07 0.84 0.01 0.17 1.07 0.62 0.80 1.20 0.18 0.48 1.02 0.25 0.79 0.94 1.01 0.72 0.78	Depth 3103 3103 3133 3226 3250 3350 3350 3360 3413 3443 3503 3596 3748 3810 3996	Deviation 1.08 1.02 1.15 1.26 1.45 1.33 1.40 1.16 1.16 1.17 1.09 1.16 1.34 1.35 1.30 1.30 1.30 1.30 1.30 1.30 1.30 1.30	Azimuth 174.90 175.60 174.00 167.30 169.60 185.50 155.00 152.50 154.50 159.80 169.80	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23		

	PUMP & CIRCULATING DATA														
			LINER	STROKE	ASSUMED	PUMP	PUMP PUMP		ÇIRO	JULATING DETA	L5		LOCITY		
MUD			SIŻE	LENGTH	EFF	RATE	VC	LUMETRIC DA	TA	Standpipe	Motor	HP	DP	DC	
PUMPS	MAKE	MODEL	(in)	(in)	(%)	(spm)	(bbis/stk)	(bbls/min)	(gal/min)	(psi)	Differential	(Sqin)	(fVmin)	(f/min)	
NO. 1	National	7P50	6.25	7.75	95.00%	118	0.0736	8.25	347	1,210	поММ	3.09	200	429	
NO. 2															
NO. 3															
COMBINED															

Ev⊆RGREEN OPERATING, INC. DAILY DRILLING REPORT

RIG CONTACT INFORMATION:

OFFICE TRAILER / FAX: 970 942 7543

CONSULTANT HAND CELL: 303 913 1054

DOGHOUSE: 307 258 7315

PUSHER:

DATE SPUD DATE	6AM DEPTH	
9/9/20044 8/16/2004	4524	
REPORT NO.	24 HR FOOTAGE	
25	191	
DRLG CONTRACTOR	DAYS SINCE SPUD	
Elenburg, Rig 12	25	
CONSULTANT	AFE# AF	PI #
John C. Lamb	43-007	-30718

CH	RONOL O	Y OF DAIL	Y OPERATIONS (06:00 - 06:00 HRS)	SLOW	PUMP RA	TE DATA:	A[/	STRIN	RING WEIGHT INFORMATION:		
	то	HOURS		Depth	SPM	Pressure	Eff BHA Wt	Rotating:	Slackoff:	Hoisting:	1,100
FROM	(hrs)	(hrs)	Activity:	4492	54	250	40,017	115,000	105,000	120,000	
(hrs) 06:00	07:15	1.25	Trip in hole								
07:15	08:00	0.75	Rig repair - boom stuck inside derrick - pull back out								
08:00	08:45	0.75	Trip in hole, washed 30' to bottom								
08:45	11:00	2.25	Drill 4333 - 4366								
11:00	11:30	0.50	Wireline survey 4 1/2 deg at 4335								
11:30	16:15	4.75	Drill 4366 - 4407			****					
16:15	17:00	0.75	Wireline survey 4 7/8 deg at 4397								
17:00	03:30	10.50	Drill 4407 - 4502								
03:30	04:15	0.75	Wireline survey 5 deg at 4492								
04:15	05:30	1.25	Drill 4502 - 4524, lost returns at 4524, lost approxim	ately 80-100 bb	l water						
05:30	06:00	0.50	Pull 1 stand and rotate pipe while isolating suction p	it and mixing 80	bbl viscou	s LCM pill (30) vis & 10 lb/bb	l fiber plug)			
											_
***					1				REC	EIVED	
									DEC	1 3 2004	
									EV OF OIL	CAS & MININ	G
TOTAL		24.00									

	DAILY	CUM
DESC.	(hrs)	(hrs)
Drill	19.25	307.00
Trip	2.00	59.50
Circulate		9.25
Rig Repair	0.75	32,25
Rig Service		6.25
Dev Survey	2.00	4.75
NU / ND		21.00
Cement		2.50
Run Casing		8.00
woc		
OH Logging		
Mix Mud		
MI & RU		6.00
Rat Hole		
Mouse Hole		
Fishing		
Other		4.50
Coring		38.00
Inspect BHA		
Cut drig line		1.75
Wash & Ream		1.25
Drill Cement		8.25
Test BOPE		6.50
woo		
PU/LD BHA		6.25
insp circ equip		3.50
TOTALS	24.00	526,50

		1	DAILY		CUM	100	AFE		
COST CODE	DESCRIPTION OF DAILY COSTS	(\$)			(\$)		(\$)		
2030.010	Land, Legal, Title, Survey, Arch, Damages, Permits, Signs	1_							
2030.031	Dirtwork, Road, Location, Pits, Liner	_		<u> </u>					
2030.019	Contract Drilling 9480 / day 392.5 / h cond 5071 26,000 mob sfc 36791	\$	9,480	\$	301,952	ļ			
2032.001	Water	1_		\$	6,712				
2032.013	Drill Bits, Stabilizers, Reamers	1_		\$	42,500				
2031.046	Cementing and Services	1		\$	26,636				
2030.053	Coring and Analysis	<u> </u>		\$	69,378				
2030.052	Logging	_							
2030.054	Mud Logging	\$	1,450	-	13,900				
2030.037	Rental Equipment	\$	1,305		39,575				
2030.028	Transportation			\$	15,434	ļ			
2032.004	Mud and Chemicals			\$	30,635				
	Directional Services, Mud Motors	<u> </u>		\$	106,512				
	Intermediate casing	1		\$	70,415				
2030.035	Contract Labor	L		\$	9,010	ļ			
2030.022	Engineering / Supervision	\$	800	\$	20,000				
2030.099	Intangible Miscellaneous and Contingencies	1							
2040.001	Surface Casing	1		\$	17,790				
2040.004	Production Casing			<u> </u>					
1011.000	Float Equipment, Shoes, Centralizers			\$	1,800				
1041.000	Wellhead Equipment	<u> </u>		\$	9,971				
1073.000	Bottom Hole Pump / Gas Lift / Other	1		<u>L</u>					
1104.000	Drivehead, Engine / Motor and Hydraulic Pump / Electric Unit	1_							
2040.052 / 2040.055	Valves and Fittings, Small / Large	1_		L.					
2040.067	Other Surface Equipment								
2040.099	Tangible Miscellaneous and Contingencies								
	TOTAL COSTS	S	13,035	5	782,220	s			

	25	Date:	09/10/04 Well Na	me:	_DA	VILY DR	ILLING		RT						Page 2
	.115 y - 448	all Rus Assir		444.55	<u> </u>			TRECOR	1	1 -	<u> </u>	г. —	BIT		
BIT	BIT			SERIAL	JETS	DEPTH	DEPTH OUT	FOOTAGE	CUM BIT HOURS	ROP	WOB	RPM	TORQUE		IT GRADING
NO.	SIZE (In)	MFG	TYPE	NO.	(32/32/32)	(R)	(4)	(6)	(hrs)	(ft/hr)	(F=)	MTR/TBL	(R - Ibs)		Seals Gge Dull O
1	12 1/4	Security	XL 18N	754840	14 / 14 / 14 / 10	494	1,799	1,305	102.75	12.7	36 - 43	45/60		6 7 WT ALL	
2	12 1/4	Security	XL43	10408516	18 / 18 / 18	1,799	2,698	899	83.25	10.8	35 - 40	45 / 45-70 45 / 60			FEF 1/8 BT ROP EEE 1/2 RG TOR
3	12 1/4	Smith	F4	MT6085	18 / 18 / 18	2,698	3,522 4,156	824 634	83.25 68.50	9.9	35 - 40 23 - 28	55 - 60	1800 - 2400		LEEE in CP
CB1	7 7/8	Smith Corion	F57YOD CMF573	MT2530	12 / 13 / 12	3,522 4,156	4,264	108	20.75	5.2	6 - 10	45 - 80			rs on inside gauge
CB2	7 7/8	Corion	CMR36	1	1.9-	4,264	4,333	69	9.25	7.5	5	60 - 75	2600	23 broken cutter	3
5	7 7/8	RTC	HP61HK	PO9116	13 / 13 / 13	4,333	4,524	191	19.25	9.9	23 - 27	57 - 65	1900 - 2200		
	MENTS		shock sub, mud m	otor and direc	tional tools; Bit 4	& 5 with shock	k sub and no	mud motor		CASING	DATA	7.47.13			
RENTAL	DAILY	COSTS		SIZE	WEIGHT	GRADE	CONN	DRIPT ID	EXTERNAL COLLAPSE	INTERNAL	CAPACITY	LENGTH	TOP SET AT	BOTTOM SET AT	
	(\$)	(5)						1443	(ptl)	(psi)	(bbls/ft)	(A)	(N)	(R KB)	
ving Qtrs	\$ 315	\$ 8,235		30"	NA	NA						40.00	0.00	40.00	
ç Tank	\$ 45	\$ 1,115		13 3/8"	54.5	J55	ST&C_	12.459	1,130	2,730	0.15450	500.00 3,545.00	0.00	498.00 3,520.00	 -
elift	\$ 60 \$ 20	\$ 1,230 \$ 500		8 5/8*	32	J55	ST&C	7.796	2,530	3,930	0.06090	3,345.00	0.00	3,320.00	·
ajohn ITrailer	\$ 50	\$ 1,250													
Cleaner	\$ 375	\$ 10,375	1114			1,15,15	- P	, в	оттомно	LE ASSE	1	La company	alah tagapayan Tabu	***	T
	\$ 100	\$ 2,500							. :::::::::::::::::::::::::::::::::::::	MAXIMUM O.D.	MINEMUM	LENGTH			
dniler	\$ 90	\$ 2,060 \$ 975		SCRIPTION OF	0 118	PROV	ADEB	BOX	AD SIZE	(In)	(in)	(A)	HOURS RUN	HRS SINCE INSPECTION	
nud cinr collans		\$ 5,585	DES	Bit	БНА	R		500	4 1/2 R	7.875	103	1.00	97.75	97.75	
k Sub	\$ 250	\$ 5,750		Bitsub		R	ig	4 1/2 R	4 1/2 XH	6.250	2,500	2.90	97.75	97.75	
				riffith Shock		Spi		4 1/2 XH	4 1/2 XH	6.500	6.375	10.03	97.75 97.75	97.75 97.75	
_	-	├		6 1/2" Drill C - 4 1/2" HW		R		4 1/2 XH 4 1/2 XH	4 1/2 XH 4 1/2 XH	6.500 4.500	2.313 2.875	525.85 61.78	97.75	97.75	
	 		 	→ 1/4 FIVY	<u></u>	<u> </u>	·#								
															l
						ļ - -		ļ			 		 		
TALS	\$ 1,305	\$ 39,575									<u> </u>				
	1					GEL	DRILLIN	G MUD R	EPORT CAKE	1	SAND	I			
AMPLE EPTH	TIME	MUD WT.	FUNNEL VISCOSITY	PV/YP	KQL .	STRENGTH	API	CALCIUM	THICKNESS	SOUDS	CONTENT	рΗ	CHLORIDES	ALKAUNITY	LCM
(R)	(hh:mm)	(PPG)	(sec/qt)	1199	(%)	(Ib/100 RZ)	(ml/30 mln)	(ppm)	(/32 tri)	(% vel)	(% vol)		(ppm) 4.000	Pf/Mf	lb/gal Bicarbs 5368 mg
,325	16:00	8.40	27	1/0		0/0	NC	30	NC	0.0	0	8.0	4,000	0 / 4.4	Disagns 3368 mg
							-								
		P., Arger			18733	DA	LY MUD	COST & I	NVENTOR	Υ		1			
			BARITE	QUICK GEL	CAUSTIC	LIME	SODA ASH	UNIDRILL	SOLKWICK	PACR	PHPA	CEDAR	TRUCKING		TOTAL COSTS
		- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	(s×)	(s.x.)	(#FX)	(ex)	(s×)	(#×)	(sx)	(sx)	(g#)	(6×)	<i>(1111)</i>		
COST	/ENTORY		120												
	ECEIVED														
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NING INVE LY MUD C EVIOLIS CL MULATIVE	NTORY OST MULATIVE COS MUD COST	<u>.</u>						OGGER RI							28
ING INVE LY MUD C VIOUS CL IULATIVE	NTORY OST MULATIVE COS	<u>.</u>	SHOW INTE	RVAL TO	RATE (DE PENETRATIO			EPORT SHOW GAS DA	TA AFTER	Formation **	Tops:	Price River	2100' Castlega	28 30
ING INVE Y MUD C VIOUS CL ULATIVE MUX BACK ROUND	NTORY OST MULATIVE COST MUD COST	Dnits)	FROM (ft)	10 (ft)	BEFORE (ft)	DURING (k)	ON AFTER (K)	BEFORE UNITS	SHOW GAS DA DURING UNITS	AFTER UNITS				2100' Castlega 3420', Aberdes	28 30
MUE INVE	NTORY OST MULATIVE COST MUD COST D GAS DATA (In I	Jnits)	FROM	TO	BEFORE	DURING	ON AFTER	BEFORE	SHOW GAS DA DURING	AFTER	Sample per	centages:			28 30
NG INVE Y MUD C VIOUS CL ULATIVE MUS BACK ROUND	NTORY OST MULATIVE COST MUD COST D GAS DATA (In I	Jnits)	FROM (ft)	10 (ft)	BEFORE (ft)	DURING (k)	ON AFTER (K)	BEFORE UNITS	SHOW GAS DA DURING UNITS	AFTER UNITS		centages:			26 30
MUD CO TOUS CU JLATIVE MUX MACK	NTORY OST MULATIVE COST MUD COST D GAS DATA (In I	Jnits)	FROM (ft)	10 (ft)	BEFORE (ft)	DURING (k)	ON AFTER (K)	BEFORE UNITS	SHOW GAS DA DURING UNITS	AFTER UNITS	Sample per	centages:			26 30
NG INVE Y MUD CO JOUS CL ULATIVE MUX BACK ROUND	NTORY OST MULATIVE COST MUD COST D GAS DATA (In I	Jnits)	FROM (ft)	10 (ft)	BEFORE (ft)	(#) 2-3	AFTER (K) 6-8	BEFORE UNITS 65	SHOW GAS DA DURING UNITS 1006	AFTER UNITS	Sample per	centages:			28 30
NG INVEI Y MUD CO MOUS CL ULATIVE MUX SACK ROUND 10-75	NTORY OST MULATIVE COS MULD COST O GAS DATA (n 1 CONN GAS	Inita) TRIP GAS	FROM (%) 4208	10 (K) 4306	BEFORE (N) 10-14	DURENG (R) 2-3	AFTER (K) 6-8	BEFORE UNITS 65	SHOW GAS DA DURING UNITS 1006	AFTER UNITS 150	Sample per Core Descrip	centages:	Blackhawk	3420', Aberdee	28 30 30 atte 3110 en 4305
NG INVEING COMMUNICATIVE MUX. SACK. ROUND. 10-75	NTORY OST MULATIVE COST MUD COST D GAS DATA (In I	Azimuth	FROM (R) 4208 DL Angle 0.19	TO (ff) 4306	Deviation	DURING (R) 2-3 Azimuth 190.80	DEVIAT DE Angle 1.35	BEFORE UNTS 65 ION SUI Depth 2244	DEVIATION CAS DA	AFTER UNITS 150 Azimuth 147.80	Sample per Core Descrip	Centages: tion: Depth 3103	Deviation 1.06	3420°, Aberdee	26 30 30 site 3110 sen 4305 se
MUD COMOUNT CLUB ATIVE MARKACK GOUND 0-75 epth 538 566	MULTINE COST MULTINE COST MUD COST CONN QAS Deviation 1 03 1.22	TRIP GAS Azimuth 134.79 189.53	FROM (N) 4208 4208 DL Angle 0.19 0.76	Depth 1407	Deviation 0.69 0.75	Azimuth 190.80	DEVIAT DL Angle 1.35 0.39	BEFORE UNITS 65 ION SUP Depth 2244 2275	DURING UNITS 1006 RVEYS Deviation 2.27 2.24	Arien UNIS 150 Azimuth 147.80 156.50	Sample per Core Descrip DL Angle 0.66	Centages: tion: Depth 3103 3133	Deviation 1.06 1.02	3420', Aberdee Azimuth 174.90 175.60	28 30 30 310 410 410 410 410 410 410 410 410 410 4
MUD CO TOUR CULTURE MUD CO TOUR CULTURE MUD CO TOUR CULTURE MUD CO TOUR CO TOUR CO TOUR CO TOUR CO TOUR CO TOUR CO TOUR CO TOUR CO TOUR CO TOUR CO TOUR CO TOUR CO TOUR CO TOUR CO TOUR CO TOUR CO TOUR CO TOUR CO TOUR CO TO	Deviation 1.03 1.22 1.20	Azimuth 154.79 19.53 136.37	PL Angle 0.19 0.76 0.17	Depth 1407 1438 1468	Deviation 0.89 0.75 0.73	Azimuth 190.80 190.50 201.30	DEVIAT DL Angle 1.35 0.39 0.47	BEFORE UNITS 65 ION SUF Depth 2244 2275 2306	Deviation 2.24 2.06	Arien UNIS 150 150 Azimuth 147.80 156.50 158.70	Sample per Core Descrip DL Angle 0.66 1.11 0.64	Depth 3103 3133 3165	Deviation 1.06 1.02 1.15	3420', Aberdee Azimuth 174,90 175.60 174.00	28 30 30 310 310 310 310 310 310 310 310 3
MUD CO TOUR CULTURE MUST CONTROL CO	MILATIVE COS MILATIVE COS MILATIVE COS MILATIVE COS MILATIVE CONN GAS Deviation 103 1.22 1.20	Azimuth 184.79 195.37 108.91	FROM (N) 4208 4208 DL Angle 0.19 0.76	Depth 1407 1438 1468 1499	Deviation 0.69 0.75 0.84	Azimuth 190.80 213.50	DEVIAT DEVIAT 1.35 0.39 0.47 0.83	BEFORE UNITS 65 ION SUP Depth 2244 2275	DURING UNITS 1006 RVEYS Deviation 2.27 2.24	Arien UNIS 150 Azimuth 147.80 156.50	Sample per Core Descrip DL Angle 0.66	Centages: tion: Depth 3103 3133	Deviation 1.06 1.02	3420', Aberdee Azimuth 174.90 175.60	24 310 ate 3110 and 4306 and 4
MACK AGUND O-75	Deviation 1.03 1.22 1.20	Azimuth 154.79 19.53 136.37	PL Angle 0.19 0.76 0.17 0.21	Depth 1407 1438 1468	Deviation 0.89 0.75 0.73	Azimuth 190.80 190.50 201.30	DEVIAT DL Angle 1.35 0.39 0.47	BEFORE W413 65 65	RVEYS Deviation 2.27 2.24 2.06 2.05	Azimuth 147.80 156.50 157.60	Sample per Core Descrip	Depth 3133 3165 3196	Deviation 1.02 1.15 1.26	Azimuth 174,90 175,60 174,00 167,30 169,80 165,50	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40
MUD CO OOUS CL. LATVE MUS CL.	Deviation 1.03 1.22 1.25 1.34 1.26 1.32 1.32 1.32 1.32 1.32 1.32 1.32 1.32 1.32 1.32 1.32 1.32 1.32 1.32 1.32 1.32 1.33 1.33 1.34 1.26 1.32 1.33 1.33 1.33 1.33 1.33 1.33 1.34 1.36 1.33 1.	Azimuth 144.79 109.53 188.91 180.49 100.29 175.85	PL Angle 0.19 0.78 0.17 0.21 0.68 0.36	Depth 1407 1438 1468 1499 1563 1595	Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20	DEVIAT DE VIAT DL Angle 1.35 0.47 0.83 1.08 1.13 0.29	BEFORE UNITS 65 65 Depth 2244 2275 2306 2337 2367 2399 2429	RVEYS Deviation 2.27 2.24 2.06 2.05 1.45 1.22	Azimuth 147.80 156.50 157.60 170.70 170.10	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87	Depth 3103 3133 3165 3196 32267 3288	Deviation 1.06 1.02 1.15 1.26 1.45 1.38 1.40	Azimuth 174.90 175.60 176.00 167.30 168.60 165.50	DLAngle 0.96 0.14 0.42 0.58 0.66 0.40 0.82
MUD C: 010UB CI. CI. CI. CI. CI. CI. CI. CI. CI. CI.	Deviation 1.03 1.22 1.26 1.34 1.26 1.34 1.	Azimuth 184.79 199.53 166.87 188.91 190.49 190.29 175.89	PROM (#) 4208 4208 DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.39	Depth 1407 1438 1468 1499 1532 1563 1595 1626	Deviation 0.69 0.75 0.73 0.84 0.51 0.85 0.85	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 197.20 198.70	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43	BEFORE UNTS 65 65 Depth 2244 2275 2306 2337 2367 2399 2429 2460	RVEYS Deviation 2.27 2.24 2.05 1.95 1.48 1.22 0.96	Azimuth 147.80 156.50 157.60 163.20 170.10 171.70	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87	Depth 3103 3135 3196 3226 3257 3288 3320	Deviation 1.06 1.02 1.15 1.26 1.45 1.38 1.40	Azimuth 174,90 175,60 174,00 167,30 169,50 165,50 155,00 159,00	24 310 Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31
MUD CL AATIVE MU	Deviation 103 1.25 1.32 1.32 1.33 1.33 1.33	Azimuth 184.79 189.51 186.87 186.87 180.29 175.88 164.40 162.92	PL Angle 0.19 0.76 0.17 0.21 0.88 0.26 0.36 0.36 0.38 0.12	To (%) 4306 4306 Depth 1407 1438 1468 1493 1532 1563 1595 1626 1657	Deviation 0.69 0.73 0.84 0.51 0.85 0.85	Azimuth 190.80 190.50 201.30 218.50 194.00 187.20 198.70 202.10	DEVIAT DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.28	BEFORE UNITS 65 65 ION SUI Depth 2244 2275 2306 2337 2367 2399 2449 2460 2492	RVEYS Deviation 2.27 2.24 2.06 2.05 1.40 1.22 0.96 0.96	Azimuth. 150 Azimuth. 147.80 156.50 158.70 157.80 170.70 170.10 171.70 171.90	DL Angle O.66 0.64 0.13 0.87 0.87 0.84	Depth 3103 3133 3165 3226 3257 3288 3320 3350	Deviation 1.08 1.02 1.15 1.26 1.45 1.38 1.40 1.40 1.36	Azimuth 174,90 175,60 174,00 167,30 169,60 165,50 155,00 159,00	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54
MUD CL ALATIVE MUL CL ALATIVE	Deviation 1.03 1.22 1.26 1.34 1.26 1.34 1.	Azimuth 184.79 199.53 166.87 188.91 190.49 190.29 175.89	PROM (#) 4208 4208 DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.39	Depth 1407 1438 1468 1499 1532 1563 1595 1626	Deviation 0.69 0.75 0.73 0.84 0.51 0.85 0.85	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 197.20 198.70	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43	BEFORE UNTS 65 65 Depth 2244 2275 2306 2337 2367 2399 2429 2460	RVEYS Deviation 2.27 2.24 2.05 1.95 1.48 1.22 0.96	Azimuth 147.80 156.50 157.60 163.20 170.10 171.70	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87	Depth 3103 3135 3196 3226 3257 3288 3320	Deviation 1.06 1.02 1.15 1.26 1.45 1.38 1.40	Azimuth 174,90 175,60 174,00 167,30 169,50 165,50 155,00 159,00	24 310 Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31
NAS INVED CO. ALATIVE MARK NO. ALATIVE MARK NO. ALATIVE MARK NO. ALATIVE MARK NO. ALATIVE MARK NO. ALATIVE MARK NO. ALATIVE MARK NO. ALATIVE MARK NO. ALATIVE MARK NO. ALATIVE MARK NO. ALATIVE NO. AL	Deviation 1.03 1.22 1.34 1.33 1.48	Azimuth 144.79 189.53 186.87 188.91 190.49 190.49 190.49 190.58 164.40 162.92 175.65	PL Angle 0.19 0.78 0.17 0.21 0.68 0.39 0.12 0.68	Depth 1407 1438 1468 1499 1595 1626 1657 1688	Deviation 0.69 0.75 0.84 0.51 0.83 0.85 0.81 1.20	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 202.10 202.10	DEVIAT DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65	Depth 2244 2275 2399 2429 2452 2523	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.45 1.22 0.98 0.98 0.91	Azimuth 150 150 150 150 150 150 150 150 150 170 170 170 170 170 171 171 171 171 17	DL Angle O.66 O.64 O.13 O.87 O.84 O.01 O.17	Depth 3103 3185 3196 3226 3220 3350 3381	Deviation 1.08 1.02 1.15 1.26 1.45 1.40 1.40 1.40 1.136 1.12	Azimuth 174,90 167,30 169,60 155,00 159,00 152,50 154,50	DLAngle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79
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MAG C. C. J. L. A. T. W. C. L. A. A. T. W. C. C. L. A. A. T. W. C. C. L. A. A. T. W. C. L. A. A. T. W. C. C. C. C. C. C. C. C. C. C. C. C. C.	Deviation 1.03 1.22 1.20 1.34 1.34 1.33 1.44 1.33 1.44 0.54 1.43 0.56 0.	Azimuth 184.79 189.53 186.87 180.49 180.49 182.92 143.19 137.08 130.59 1	PL Angle 0.19 0.78 0.17 0.21 0.83 0.26 0.36 0.12 0.89 0.12 0.83 1.29 1.38 0.51	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1688 1720 1751 1782 1813	Deviation 0.69 0.75 0.73 0.84 0.51 0.85 0.85 0.85 0.81 1.20 0.84 0.93 1.12	Azimuth 190.80 190.50 201.30 218.50 208.70 194.00 197.20 198.70 202.10 202.10 179.00 157.60 164.00	DE VIAT DE VIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.23 1.04 0.43 1.04 1.05	DEFORE UNTS 65 65 CON SUI Depth 2244 2275 2306 2337 2367 2367 2367 2429 2460 2492 2523 2553 2554 2544 2644	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.96 0.96 0.91 1.23 1.10 1.30 1.60	Azimuth 147.80 156.50 157.40 163.70 170.80 163.70 1655.40 1655.40	DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 0.62 0.80 1.20	Depth. 3103 3133 3165 3226 3257 3285 3320 3350 3341 3443 3442 3503	Deviation 1.08 1.02 1.15 1.38 1.40 1.30 1.10 1.10 1.10 1.10 1.10 1.10 1.1	Azimuth 174,90 175,60 174,00 167,30 169,60 165,50 155,00 159,00 152,50 154,50 159,80 169,80	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
MULE CALL ATTVE MULE CALL ATTVE MULE CALL ATTVE PP MULE CALL AT	Deviation	Azimuth 104.79 189.53 186.87 180.89 180.29 175.88 164.40 162.92 156.62 143.19 137.08 130.59 112.85	DL Angle 0.19 0.76 0.17 0.21 0.68 0.39 0.12 0.68 1.29 0.551	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1688 1720 1751 1782 13813 1844	Deviation 0.69 0.75 0.73 0.84 0.51 0.85 0.85 0.85 0.85 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05	Azimuth 190.80 190.50 201.30 201.30 202.10 195.60 157.60 164.00 158.00 158.00 158.00	DEVIAT DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.13 0.29 0.65 1.23 1.04 0.43 1.04 0.59	Depth 2244 2275 2399 2449 2523 2554 2614 2644 2672	RVEYS Deviation 2.27 2.24 2.06 2.05 1.44 1.22 0.98 0.98 0.91 1.23 1.10 1.30	Azimuth 147.80 150.80 150.80 150.80 150.80 157.80 163.70 170.70 171.90 171.90 171.90 171.90 163.70 153.740	DL Angle O.66 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.80	Depth 3103 3133 3165 3196 3257 3288 3320 3351 3413 3443 3447	Deviation 1.06 1.02 1.15 1.26 1.45 1.36 1.40 1.40 1.10 1.11 1.10 1.11 1.11 1.11	Azimuth 174,90 175,60 174,00 167,30 169,60 165,50 155,00 159,00 152,50 154,50 159,80 169,80	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
MULC ALATIVE MU	Deviation 1.03 1.22 1.20 1.34 1.34 1.34 1.34 1.34 1.34 1.43 0.84 0.71 0.65	Azimuth 184.79 189.53 186.87 180.49 180.49 182.92 143.19 137.08 130.59 1	PROM (#) 4208 4208 DL Angle 0.19 0.76 0.17 0.21 0.68 0.28 0.36 0.39 0.12 0.68 1.29 1.88 0.51	Depth 1407 1438 1468 1499 1532 1563 1595 1626 1657 1688 1720 1751 1782 1813	Deviation 0.69 0.75 0.73 0.84 0.51 0.85 0.85 0.85 0.81 1.20 0.84 0.93 1.12	Azimuth 190.80 190.50 201.30 218.50 208.70 194.00 197.20 198.70 202.10 202.10 179.00 157.60 164.00	DE VIAT DE VIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.23 1.04 0.43 1.04 1.05	DEFORE UNTS 65 65 CON SUI Depth 2244 2275 2306 2337 2367 2367 2367 2429 2460 2492 2523 2553 2554 2544 2644	Deviation 2.27 2.24 2.06 2.05 1.48 1.22 0.98 0.98 0.91 1.23 1.10 1.30 1.60 1.55	Azimuth 147.80 156.50 158.70 171.20 170.60 163.70 157.40 163.70 157.40 163.70	OL Angle O.66 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.80 1.20 0.18	Depth 3103 3133 3165 3196 3226 3227 3283 3350 3381 3413 3443 3472 3503 3508	Deviation 1.06 1.02 1.15 1.26 1.45 1.38 1.40 1.40 1.36 1.10 1.10 1.11 1.10 1.11 1.10 1.11 1.10 1	Azimuth 174,90 175,60 174,00 167,30 169,60 165,50 155,00 159,00 152,50 154,50 159,80 169,80	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
mutative mut	Deviation	Azimuth 184.79 180.29 175.85 186.87 180.29 175.85 184.19 137.08 130.59 112.85 107.94 109.50 120.10 120.70	PROM (#) 4208 4208 DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.39 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.85 0.85	Depth 1407 1438 1468 1499 1532 1583 1720 1751 1783 1844 1875 1996 1935	Deviation 0.69 0.75 0.73 0.81 0.81 0.81 0.81 0.83 0.84 0.85 0.84 0.83 0.84 0.93 1.12 1.05 1.18 1.30 1.75	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 157.60 154.00 155.00 155.00 156.00 156.00 156.00	DEVIAT C(S) 6-8 DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.13 0.29 0.65 1.23 1.29 0.65 1.23 1.04 0.43 1.04 0.59 0.83 1.05 1.29 0.65	Depth 2244 2275 2306 2397 2499 2460 2492 2553 2584 2614 2672 2703 2734 2764	Deviation 2.27 2.24 2.06 2.05 1.48 1.22 0.96 0.91 1.23 1.10 1.50 1.66 1.86 1.86 1.86 1.86 1.86 1.86 1.86	Azimuth 147.80 156.50 158.70 171.90 163.70 163.70 163.70 163.70 163.70 175.40 163.70 175.40 163.70 175.90 163.70 175.90	DL Angle O.66 1.11 0.64 0.13 0.73 1.62 0.87 0.01 0.17 1.07 0.62 0.80 1.20 0.18 0.48 1.02 0.25	Depth 3103 3133 3165 3196 3226 3227 3288 3320 3350 3381 3443 3472 3598 3686 3748 3810	Deviation 1.05 1.02 1.15 1.38 1.40 1.36 1.12 1.39 1.16 1.34 1.50 2.00 2.25 2.50 3.00	Azimuth 174,90 175,60 174,00 167,30 169,60 165,50 155,00 159,00 152,50 154,50 159,80 169,80	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
MAX. MAX.	Deviation 1.03 1.22 1.20 1.32 1.34 1.45 1.45 1.30 1.45 1.45 1.00 1.10 1.16 1.	Azimuth 154.79 189.53 186.87 188.91 180.49 180.29 175.88 164.40 182.92 155.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70	DL Angle 0.19 0.76 0.17 0.21 0.68 0.36 0.39 0.12 0.68 1.29 0.51 0.95 1.04 0.65 0.62 0.40 0.53	Depth 1407 1438 1468 1499 1532 1595 1626 1770 1782 1813 1844 1875 1906 1935 1967	Deviation 0.69 0.75 0.84 0.51 0.85 0.81 1.00 0.88 0.85 0.11 1.00 0.88 0.84 0.93 1.12 1.05 1.18 1.30 1.75	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 198.70 202.10 202.10 179.00 157.60 164.00 149.00 150.00 150.00 150.00 150.00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.12 0.65 1.23 1.04 0.43 1.06 0.59 0.83 0.54 1.59 0.50	Depth 2244 2329 2469 2523 2553 2584 2614 2644 2826	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.44 1.22 0.96 0.91 1.23 1.10 1.30 1.60 1.55 1.66 1.62 1.77 1.30	Azimuth 147.80 155.90 155.80 157.80 163.70 171.70 171.120 171.80 163.70 163.70 163.70 163.70 163.70 163.70 163.70 163.70 163.70	DL Angle O.66 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.80 1.20 0.48 1.02 0.25 0.79	Depth 3103 3133 3165 3196 3226 3257 3288 3350 3350 3361 3443 3472 3503 3686 3748 3810 3802	Deviation 1.08 1.02 1.15 1.26 1.45 1.38 1.40 1.12 1.09 1.16 1.34 1.50 2.25 2.50 3.00 3.00 3.00	Azimuth 174,90 175,60 174,00 167,30 169,60 165,50 155,00 159,00 152,50 154,50 159,80 169,80	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
MOLECULATIVE MO	Deviation 103 1.22 1.20 1.34 1.32 1.34 1.33 1.45 1.43 0.64 0.71 0.66 0.50 0.91 1.00 1.0	Azimuth 184.79 189.53 186.87 180.49 180.49 180.29 175.86 164.40 162.92 156.82 143.19 137.08 130.59 112.55 107.94 109.50 120.10 126.70 132.57	PROM (#) 4208 4208 PL Angle 0.19 0.78 0.17 0.21 0.83 0.26 0.36 0.36 0.39 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.65 0.65 0.65 0.62 0.40 0.53	Depth 1407 1438 1468 1499 1532 1563 1720 17751 1782 1813 1844 1975 1908 1935 1906 1997	Deviation 0.69 0.75 0.75 0.73 0.84 0.51 0.85 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.18 1.30 1.75 1.70	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 198.70 202.10 202.10 179.00 149.00 149.00 155.00 146.50 152.00 156.00 156.00 158.40	DEVIAT DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.23 1.04 0.65 1.23 1.04 0.55 1.23 1.06 0.59 0.83 0.54 1.59 0.50 0.39	Depth 2244 2275 2399 2429 2460 2523 2553 2584 2644 2672 2703 2734 2764 2826 2856 2856	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.98 0.98 0.98 1.13 1.10 1.50 1.58 1.66 1.82 1.77 1.30 1.20	Arimuth 147.80 156.50 177.10 177.10 177.10 177.10 177.10 168.10 177.10 177.10 169.10 169.10 177.10 177.10 189.10 189.10 177.10 177.10 189.10 189.10 189.10	DL Angle Core Descrip DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.80 1.20 0.18 0.45 1.02 0.25 0.25	Depth. 3103 3133 3165 326 3267 3285 3390 3886 3896 3896 3896	Deviation 1.08 1.02 1.15 1.26 1.45 1.38 1.40 1.36 1.15 1.36 1.15 1.36 1.15 1.36 1.15 1.36 1.15 1.36 1.	Azimuth 174,90 175,60 174,00 167,30 169,60 165,50 155,00 159,00 152,50 154,50 159,80 169,80	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
MOLECULATIVE MO	Deviation 1.03 1.22 1.20 1.32 1.34 1.45 1.45 1.30 1.45 1.45 1.00 1.10 1.16 1.	Azimuth 154.79 189.53 186.87 188.91 180.49 180.29 175.88 164.40 182.92 155.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70	DL Angle 0.19 0.76 0.17 0.21 0.68 0.36 0.39 0.12 0.68 1.29 0.51 0.95 1.04 0.65 0.62 0.40 0.53	Depth 1407 1438 1468 1499 1532 1595 1626 1770 1782 1813 1844 1875 1906 1935 1967	Deviation 0.69 0.75 0.84 0.51 0.85 0.81 1.00 0.88 0.85 0.11 1.00 0.88 0.84 0.93 1.12 1.05 1.18 1.30 1.75	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 198.70 202.10 202.10 179.00 157.60 164.00 149.00 150.00 150.00 150.00 150.00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.12 0.65 1.23 1.04 0.43 1.06 0.59 0.83 0.54 1.59 0.50	Depth 2244 2329 2469 2523 2553 2584 2614 2644 2826	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.44 1.22 0.96 0.91 1.23 1.10 1.30 1.60 1.55 1.66 1.62 1.77 1.30	Azimuth 147.80 155.90 155.80 157.80 163.70 171.70 171.120 171.80 163.70 163.70 163.70 163.70 163.70 163.70 163.70 163.70 163.70	DL Angle O.66 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.80 1.20 0.48 1.02 0.25 0.79	Depth 3103 3133 3165 3196 3226 3257 3288 3350 3350 3361 3443 3472 3503 3686 3748 3810 3802	Deviation 1.08 1.02 1.15 1.26 1.45 1.38 1.40 1.12 1.09 1.16 1.34 1.50 2.25 2.50 3.00 3.00 3.00	Azimuth 174,90 175,60 174,00 167,30 169,60 165,50 155,00 159,00 152,50 154,50 159,80 169,80	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
MOLENTE PARTIES AND A STATE OF THE PARTIES AND A	Deviation Constitution Constit	Azimuth 184.79 189.53 186.87 188.91 180.49 180.29 175.86 184.40 182.92 185.80 143.19 137.08 130.59 112.55 107.94 109.50 122.07 132.57 137.30 141.51 155.70	PROM (#) 4208 4208 PL Angle 0.19 0.78 0.17 0.21 0.63 0.26 0.36 0.39 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.65 0.65 0.65 0.65 0.62 0.40 0.53 0.33 0.62 1.44	Depth 1407 1438 1468 1499 1532 1563 1720 17751 1782 1813 1844 1975 1997 2028 2060 2091	Deviation 0.69 0.75 0.75 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.18 1.30 1.75 1.70 1.61 1.91 1.88	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 187.20 198.70 202.10 202.10 179.00 149.00 155.00 146.50 152.00 158.40 158.40 154.20	DEVIAT DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.12 0.65 1.23 1.04 0.43 1.06 0.59 0.83 0.54 1.59 0.50 0.39 1.12 1.06 0.59 0.39 1.12 1.06 0.59 0.39 1.12 1.06 0.59 0.39 1.12 1.05 0.50 0.39 1.12	Depth 2244 2275 2399 2429 2452 2523 2584 2844 2874 2703 2734 2764 2826 2856 2857 2919 2951	RVEYS Deviation 2.27 2.24 2.06 2.05 1.99 1.48 1.22 0.98 0.98 0.91 1.23 1.10 1.50 1.60 1.52 1.77 1.30 1.60 1.52 1.77 1.30 1.00 1.00 0.90 0.90 0.90	Arimuth 147.80 156.50 170.10 171.90 177.10 1	DL Angle O.66 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.80 1.20 0.18 0.40 1.02 0.25 0.79 0.94 1.01 0.72 0.72	Depth. 3103 3133 3165 326 3267 3285 3390 3886 3896 3896 3896	Deviation 1.08 1.02 1.15 1.26 1.45 1.38 1.40 1.36 1.15 1.36 1.15 1.36 1.15 1.36 1.15 1.36 1.15 1.36 1.	Azimuth 174,90 175,60 174,00 167,30 169,60 165,50 155,00 159,00 152,50 154,50 159,80 169,80	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
MOLECULATIVE MO	Deviation	TRIP GAS TRI	PROM (#) 4208 4208 4208 4208 DL Angle 0.19 0.78 0.17 0.21 0.68 0.26 0.39 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.65 0.62 0.40 0.53 0.33 0.62 1.48 2.30 0.51	Depth 1407 1438 1469 1532 1563 1595 1826 1657 1813 1844 1875 1906 1935 1967 1997 2028 2060 2991 2120	Deviation 0.69 0.75 0.73 0.81 1.20 1.00 0.88 0.31 1.20 1.10 1.10 1.10 1.10 1.10 1.10 1.1	Azimuth 190.80 190.50 201.30 218.50 208.70 194.00 197.20 198.70 202.10 202.10 197.60 164.00 155.00 165.00 161.00 155.00 164.20 156.00 161.00 155.40 164.20 154.10	DEVIAT C(S) 6-8 DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.13 0.29 0.65 1.23 1.04 0.43 1.04 0.43 1.05 0.50 0.50 0.39 0.51 1.59 0.50 0.39 0.112 1.05 0.26	Depth 2244 2275 2306 2397 2399 2460 2492 2553 2584 2614 2267 2703 2734 2764 2826 2856 2857 2919 2951	Deviation 2.27 2.24 2.06 2.05 1.48 1.22 0.96 0.96 1.130 1.50 1.66 1.62 1.77 1.30 1.20 1.00 1.50 1.66 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Azimuth 147.80 156.50 155.70 177.10 171.90 163.70 163.70 163.70 171.70 171.90 171.70 171.90 163.70 1	DL Angle O.66 1.11 0.64 0.13 1.62 0.87 0.05 0.10 0.17 0.62 0.80 1.20 0.18 0.48 0.19 0.19 0.75 0.75 0.75 0.75 0.75	Depth. 3103 3133 3165 326 3267 3285 3390 3886 3896 3896 3896	Deviation 1.08 1.02 1.15 1.26 1.45 1.38 1.40 1.36 1.15 1.36 1.15 1.36 1.15 1.36 1.15 1.36 1.15 1.36 1.	Azimuth 174,90 175,60 174,00 167,30 169,60 165,50 155,00 159,00 152,50 154,50 159,80 169,80	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
MULTINE MALE MALE MALE MALE MALE MALE MALE MAL	Deviation 103 1.22 1.20 1.25 1.34 1.48 1.43 0.54 1.16 1.17 0.30 0.35 0.3	Azimuth 154.79 189.53 186.87 188.91 180.49 180.29 175.88 164.40 162.92 156.82 143.19 137.08 130.59 112.65 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 233.75	DL Angle 4208 DL Angle 0.19 0.78 0.17 0.21 0.68 0.36 0.39 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.62 0.40 0.53 0.33 0.82 1.48 2.30 0.51	Depth 1407 1438 1468 1499 1532 1595 1626 1857 1688 1720 1751 1782 1813 1844 1875 1906 1935 1967 1997 2028 2060 2091 2152	Deviation 0.69 0.75 0.73 0.84 0.51 0.69 0.73 0.84 0.51 0.63 0.85 0.81 1.00 0.88 0.81 1.00 1.10 1.10 1.10	Azimuth 190.80 190.50 201.30 218.50 208.70 194.00 187.20 198.70 202.10 202.10 179.00 157.60 164.00 149.00 155.40 152.00 154.00 154.10 154.20 154.20 154.20 154.20 154.10 155.20	DEVIAT DL Angle 1,35 0,39 0,47 0,83 1,08 1,13 0,29 0,43 1,128 0,65 1,23 1,06 0,59 0,83 1,08 0,59 0,50 0,39 1,12 1,05 0,26 1,03	Depth 2244 2275 2306 2337 2367 2399 2429 2460 2523 2553 2554 2614 2644 2672 2703 2734 2764 2826 2856 2867 2919 2951 2981 3013	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.44 1.22 0.98 0.98 0.91 1.30 1.60 1.55 1.68 1.62 1.77 1.30 1.20 0.90 0.90 0.90 0.90	Azimuth 147.80 155.90 155.90 157.60 163.70 171.70 171.90 171.90 171.90 171.90 171.90 183.70 1	DL Angle O.66 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.80 1.20 0.48 1.02 0.25 0.79 0.94 1.01 0.72 0.78	Depth. 3103 3133 3165 326 3267 3285 3390 3886 3896 3896 3896	Deviation 1.08 1.02 1.15 1.26 1.45 1.38 1.40 1.36 1.15 1.36 1.15 1.36 1.15 1.36 1.15 1.36 1.15 1.36 1.	Azimuth 174,90 175,60 174,00 167,30 169,60 165,50 155,00 159,00 152,50 154,50 159,80 169,80	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
MAGE NO PER NO P	Deviation	TRIP GAS TRI	PROM (#) 4208 4208 4208 4208 DL Angle 0.19 0.78 0.17 0.21 0.68 0.26 0.39 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.65 0.62 0.40 0.53 0.33 0.62 1.48 2.30 0.51	Depth 1407 1438 1469 1532 1563 1595 1826 1657 1813 1844 1875 1906 1935 1967 1997 2028 2060 2991 2120	Deviation 0.69 0.75 0.73 0.81 1.20 1.00 0.88 0.31 1.20 1.10 1.10 1.10 1.10 1.10 1.10 1.1	Azimuth 190.80 190.50 201.30 218.50 208.70 194.00 197.20 198.70 202.10 202.10 197.60 164.00 155.00 165.00 161.00 155.00 164.20 155.40 164.20 154.10 155.20 164.20	DEVIAT C(S) 6-8 DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.13 0.29 0.65 1.23 1.04 0.43 1.04 0.43 1.05 0.50 0.50 0.39 0.51 1.59 0.50 0.39 0.112 1.05 0.26	Depth 2244 2275 2306 2397 2399 2460 2492 2553 2584 2614 2267 2703 2734 2764 2826 2856 2857 2919 2951	Deviation 2.27 2.24 2.06 2.05 1.48 1.22 0.96 0.96 1.130 1.50 1.66 1.62 1.77 1.30 1.20 1.00 1.50 1.66 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Azimuth 147.80 156.50 155.70 177.10 171.90 163.70 163.70 163.70 171.70 171.90 171.70 171.90 163.70 1	DL Angle O.66 1.11 0.64 0.13 1.62 0.87 0.05 0.10 0.17 0.62 0.80 1.20 0.18 0.48 0.19 0.19 0.75 0.75 0.75 0.75 0.75	Depth. 3103 3133 3165 326 3267 3285 3390 3886 3896 3896 3896	Deviation 1.08 1.02 1.15 1.26 1.45 1.38 1.40 1.36 1.15 1.36 1.15 1.36 1.15 1.36 1.15 1.36 1.15 1.36 1.	Azimuth 174,90 175,60 174,00 167,30 169,60 165,50 155,00 159,00 152,50 154,50 159,80 169,80	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
MAGE NO PER NO P	Deviation Constitution Constit	Azimuth 184.79 189.53 186.87 188.91 180.49 180.49 180.49 130.59 175.86 184.40 162.92 156.82 143.19 137.08 130.59 172.55 107.94 109.50 122.70 132.57 137.30 141.51 165.70 235.75 203.90 173.03 172.10	PROM (#) 4208 4208 PL Angle 0.19 0.78 0.17 0.21 0.63 0.28 0.38 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.65 0.65 0.62 0.40 0.53 0.33 0.62 1.44 2.30 0.51 0.55	Depth 1407 1438 1468 1595 1628 1720 1751 1762 1813 1844 1997 2028 2060 2091 2120 2152 2183	Deviation 0.69 0.75 0.75 0.73 0.84 0.51 0.83 0.85 0.31 1.20 1.00 0.88 0.34 1.12 1.05 1.18 1.30 1.75 1.70 1.61 1.91 1.81 1.95 1.74 1.99	Azimuth 190.80 190.50 201.30 218.50 208.70 194.00 187.20 198.70 202.10 202.10 202.10 179.00 149.00 155.00 146.50 152.00 156.00 155.40 154.20 155.40 155.20 145.60 145.10	DEVIAT DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.12 0.65 1.23 1.04 0.43 1.06 0.59 0.50 0.39 1.12 1.06 0.59 0.30 0.54 1.59 0.50 0.39 1.12 1.06 0.59 0.30 0.54 1.09 0.50 0.39 0.106 0.59 0.30 0.50 0.30 0.30 0.30 0.30 0.30 0.30	Depth 2244 2275 2399 2429 2452 2523 2553 2584 2644 2872 2703 2734 2764 2826 2856 2887 2919 2951 2981 3013 3014	RVEYS Deviation 2.27 2.24 2.06 2.05 1.99 1.48 1.22 0.98 0.98 1.10 1.30 1.60 1.58 1.66 1.82 1.71 1.30 1.20 0.90 0.90 0.90 0.90 0.90 0.90 0.90	Arimuth 147.80 156.50 170.10 171.20 170.80 163.70 177.10 177.90 165.40 168.10 177.10 179.90 186.10 177.10 129.20 129.20 120.20 1	DL Angle Core Descrip DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.80 1.20 0.18 0.45 1.02 0.25 0.79 0.94 1.01 0.72 0.73 0.73 0.73 0.73 0.73 0.73 0.73 0.73	Depth. 3103 3133 3165 326 3267 3285 3390 3886 3896 3896 3896	Deviation 1.08 1.02 1.15 1.26 1.45 1.38 1.40 1.36 1.15 1.36 1.15 1.36 1.15 1.36 1.15 1.36 1.15 1.36 1.	Azimuth 174,90 175,60 174,00 167,30 169,60 165,50 155,00 159,00 152,50 154,50 159,80 169,80	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
MOLECULATIVE MO	Deviation Constitution Constit	Azimuth 184.79 189.53 186.87 188.91 180.49 180.49 180.49 130.59 175.86 184.40 162.92 156.82 143.19 137.08 130.59 172.55 107.94 109.50 122.70 132.57 137.30 141.51 165.70 235.75 203.90 173.03 172.10	PROM (#) 4208 4208 PL Angle 0.19 0.78 0.17 0.21 0.63 0.28 0.38 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.65 0.65 0.62 0.40 0.53 0.33 0.62 1.44 2.30 0.51 0.55	Depth 1407 1438 1468 1595 1628 1720 1751 1762 1813 1844 1997 2028 2060 2091 2120 2152 2183	Deviation 0.69 0.75 0.75 0.73 0.84 0.51 0.83 0.85 0.31 1.20 1.00 0.88 0.34 1.12 1.05 1.18 1.30 1.75 1.70 1.61 1.91 1.81 1.95 1.74 1.99	Azimuth 190.80 190.50 201.30 218.50 208.70 194.00 167.20 198.70 202.10 202.10 179.00 146.50 155.00 161.00 155.40 154.00 154.10 155.20 154.10 155.20 154.10 155.20	DEVIAT C(S) 6-8 DEVIAT DL. Angle 1,35 0,39 0,47 0,83 1,08 1,13 0,29 0,43 1,108 1,13 0,29 0,43 1,08 1,13 1,13 1,13 1,13 1,13 1,13 1,13 1,1	Depth 2244 2275 2306 2337 2389 2429 2523 2553 2554 2614 2642 2703 2734 2764 2826 2856 2897 2919 2951 3013 3042 3072	RVEYS Deviation 2.27 2.24 2.06 2.05 1.99 1.48 1.22 0.98 0.98 1.10 1.30 1.60 1.58 1.66 1.82 1.71 1.30 1.20 0.90 0.90 0.90 0.90 0.90 0.90 0.90	Arimuth 147.80 156.50 170.10 171.20 170.80 163.70 177.10 177.90 165.40 168.10 177.10 179.90 186.10 177.10 129.20 129.20 120.20 1	DL Angle Core Descrip DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.80 1.20 0.18 0.45 1.02 0.25 0.79 0.94 1.01 0.72 0.73 0.73 0.73 0.73 0.73 0.73 0.73 0.73	Depth. 3103 3133 3165 326 3267 3285 3390 3886 3896 3896 3896	Deviation 1.08 1.02 1.15 1.26 1.45 1.38 1.40 1.36 1.15 1.36 1.15 1.36 1.15 1.36 1.15 1.36 1.15 1.36 1.	Azimuth 174,90 175,60 174,00 167,30 169,60 165,50 155,00 159,00 152,50 154,50 159,80 169,80	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
NG INVESTIGATION OF THE PROPERTY OF THE PROPER	Deviation Constitution Constit	Azimuth 184.79 189.53 186.87 188.91 180.49 180.49 180.49 130.59 175.86 184.40 162.92 156.82 143.19 137.08 130.59 172.55 107.94 109.50 122.70 132.57 137.30 141.51 165.70 235.75 203.90 173.03 172.10	PROM (#) 4208 4208 PL Angle 0.19 0.78 0.17 0.21 0.63 0.28 0.38 0.12 0.68 1.29 1.88 0.51 0.95 1.04 0.65 0.65 0.65 0.62 0.40 0.53 0.33 0.62 1.44 2.30 0.51 0.55	Depth 1407 1438 1468 1595 1628 1720 1751 1762 1813 1844 1997 2028 2060 2091 2120 2152 2183	Deviation 0.69 0.75 0.75 0.73 0.84 0.51 0.83 0.85 0.31 1.20 1.00 0.88 0.34 1.12 1.05 1.18 1.30 1.75 1.70 1.61 1.91 1.81 1.95 1.74 1.99	Azimuth 190.80 190.50 201.30 218.50 208.70 194.00 167.20 198.70 202.10 202.10 179.00 146.50 155.00 161.00 155.40 154.00 154.10 155.20 154.10 155.20 154.10 155.20	DEVIAT C(8) 6-6 6-6 DEVIAT DL Angle 1,35 0,39 0,47 0,83 1,108 1,113 0,29 0,43 1,28 0,65 1,23 1,04 0,43 1,04 0,43 1,05 0,59 0,50 1,03 0,50 1,59 0,50 0,50 0,50 0,50 0,50 0,50 0,50 0	Depth 2244 2275 2306 2337 2389 2429 2523 2553 2554 2614 2642 2703 2734 2764 2826 2856 2897 2919 2951 3013 3042 3072	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.96 0.96 0.91 1.23 1.10 1.30 1.58 1.60 1.58 1.60 1.77 1.30 1.00 1.00 1.00 1.00 1.00	Azimuth 147.80 150.50 155.50 157.60 163.20 170.70 170.10 171.70 171.90 163.70 163.40 163.60 163.20 163.00 177.10 177.10 178.00 163.70 163.70 163.70 163.70 163.70 163.70 170.70 1	DL Angle Core Descrip DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.80 1.20 0.18 0.45 1.02 0.25 0.79 0.94 1.01 0.72 0.73 0.73 0.73 0.73 0.73 0.73 0.73 0.73	Depth 3103 3103 3103 3105 3196 3226 3257 3283 3350 3350 3350 3360 3443 3472 3503 3666 3748 3610 3902 3996 4087	Deviation 1.08 1.02 1.15 1.26 1.45 1.38 1.40 1.36 1.15 1.36 1.15 1.36 1.15 1.36 1.15 1.36 1.15 1.36 1.	Azimuth 174,90 175,60 174,00 167,30 169,60 165,50 155,00 159,00 152,50 154,50 159,80 169,80	DLAngle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23 1.52
MOLECULATIVE MO	Deviation Constitution Constit	Azimuth 184.79 189.53 186.87 180.49 180.49 180.29 175.88 164.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 155.70 235.75 203.90 173.03 172.10 183.30	PROM (1) (4) (4) (4) (4) (5) (6) (7) (6) (7) (7) (7) (7) (7) (7) (7) (7) (7) (7	Dopth 1407 1438 1468 1499 1532 1563 1720 1751 1813 1844 1875 1906 1935 1967 1997 2028 2090 2091 2120 2152 2183 2213	Deviation 10-14 Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.18 1.30 1.75 1.70 1.61 1.91 1.88 1.95 1.74 1.99 2.03 2.42 ASSUMED EFF ('5)	Asimuth 190.80 190.50 201.30 218.50 206.70 194.00 197.20 198.70 202.10 179.00 157.60 154.00 158.00 158.00 159.00 1	DEVIAT DL Angle 1,35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.09 0.65 1.23 1.06 0.59 0.63 0.59 0.50 0.39 1.11 0.50 0.26 1.03 0.86 0.13 1.52	Depth	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.96 0.91 1.30 1.60 1.30 1.60 1.82 1.77 1.30 1.50 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0	Asimuth 147.80 155.50 157.60 163.70 170.70 170.10 171.70 171.90 163.70 165.40 163.70 157.40 163.70 157.40 163.70 157.40 163.70 163.70 177.10 1	DL Angle O.66 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.80 1.20 0.18 0.45 1.02 0.25 0.79 0.94 1.01 0.72 0.78 0.58 1.03 0.86	Depth 3103 3133 3165 3196 3226 3257 3288 3320 3350 3381 3443 3472 3503 3686 3748 3810 3902 3996 4087	Deviation 1.08 1.02 1.15 1.26 1.15 1.38 1.40 1.36 1.12 1.09 1.16 1.34 1.50 2.25 2.50 3.00 3.75 4.125 1.25 1.36 1	Azimuth 174,90 175,80 174,00 167,30 169,80 165,50 155,00 152,50 159,00 174,50 174,50 174,50 174,50 174,50 175,80 176,80 176,80 176,80	DLAngle 0.98 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
NG INVESTIGATION OF THE PROPERTY OF THE PROPER	Deviation	TRIP GAS Azimuth 184.79 189.53 185.87 188.91 180.49 180.29 175.88 184.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 122.57 137.30 141.51 165.70 235.75 203.90 173.03 172.10	PL Angle 4208 DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.36 0.39 0.12 0.68 1.29 1.38 0.51 0.51 0.55 0.62 0.40 0.53 0.33 0.89 0.14 0.65 0.62 0.40 0.53 0.33 0.89 0.10 0.51 0.51 0.55 0.52 0.53 0.33 0.33 0.82 0.40 0.53 0.53 0.53 0.53 0.55 0.55 0.55 0.5	Depth 1407 1438 1468 1499 1532 1595 1626 1657 1782 1813 1844 1875 1906 1937 2028 2060 2091 2120 2152 2183 2213	Deviation 0.69 0.75 0.73 0.84 0.51 0.85 0.81 1.20 1.00 0.88 0.93 1.12 1.105 1.18 1.30 1.75 1.70 1.61 1.91 1.88 1.95 2.03 2.42 ASSUMED EFF	Azimuth 190.80 190.80 190.50 201.30 218.50 206.70 194.00 187.20 198.70 202.10 202.10 202.10 179.00 144.00 149.00 155.40 155.00 161.00 155.40 154.10 155.20 145.10 155.20	DEVIAT C(S) 6-8	Depth 2244 2275 2306 2337 2399 2429 2460 2492 2553 2554 2614 2842 2703 2734 2866 2856 2857 2919 2951 3013 3042 3072 RCULATI PUMP PUMP PUMP ETRIC DA	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.40 1.22 0.96 0.96 0.91 1.23 1.10 1.30 1.60 1.55 1.66 1.62 1.77 1.30 1.20 0.90 0.90 0.90 0.90 0.90 0.90 0.90	Azimuth 147.80 155.50 157.60 163.70 170.70 170.70 170.70 171.90 175.40 163.70 168.10 177.10 169.10 169.10 199.10 1	Sample per	Depth 3103 3133 3165 3196 3226 3257 3288 3350 3381 3443 3472 3598 3686 3748 3810 3902 3996 4057	Deviation	Azimuth 174,90 175,60 174,00 167,30 169,60 165,50 155,00 152,50 154,50 159,80 160,20 178,80	DLAngle 0.98 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
Y MUD COVIOUS CLULATIVE MUE BACK ROUND	Deviation Constitution Constit	Azimuth 184.79 189.53 186.87 180.49 180.49 180.29 175.88 164.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 155.70 235.75 203.90 173.03 172.10 183.30	PROM (1) (4) (4) (4) (4) (5) (6) (7) (6) (7) (7) (7) (7) (7) (7) (7) (7) (7) (7	Dopth 1407 1438 1468 1499 1532 1563 1720 1751 1813 1844 1875 1906 1935 1967 1997 2028 2090 2091 2120 2152 2183 2213	Deviation 10-14 Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.18 1.30 1.75 1.70 1.61 1.91 1.88 1.95 1.74 1.99 2.03 2.42 ASSUMED EFF ('5)	Asimuth 190.80 190.50 201.30 218.50 206.70 194.00 197.20 198.70 202.10 179.00 157.60 154.00 158.00 158.00 159.00 1	DEVIAT DL Angle 1,35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.09 0.65 1.23 1.06 0.59 0.63 0.59 0.50 0.39 1.11 0.50 0.26 1.03 0.86 0.13 1.52	Depth	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.96 0.91 1.30 1.60 1.30 1.60 1.82 1.77 1.30 1.50 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0	Asimuth 147.80 155.50 157.60 163.70 170.70 170.10 171.70 171.90 163.70 165.40 163.70 157.40 163.70 157.40 163.70 157.40 163.70 163.70 177.10 1	DL Angle O.66 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.80 1.20 0.18 0.45 1.02 0.25 0.79 0.94 1.01 0.72 0.78 0.58 1.03 0.86	Depth 3103 3133 3165 3196 3226 3257 3288 3320 3350 3381 3443 3472 3503 3686 3748 3810 3902 3996 4087	Deviation 1.08 1.02 1.15 1.26 1.15 1.38 1.40 1.36 1.12 1.09 1.16 1.34 1.50 2.25 2.50 3.00 3.75 4.125 1.25 1.36 1	Azimuth 174,90 175,80 174,00 167,30 169,80 165,50 155,00 152,50 159,00 174,50 174,50 174,50 174,50 174,50 175,80 176,80 176,80 176,80	DLAngle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23 1.52

EVERGREEN OPERATING, INC. DAILY DRILLING REPORT

RIG CONTACT INFORMATION:									
OFFICE TRAILER / FAX:	970 942 7543								
CONSULTANT HAND CELL:	303 913 1054								
DOGHOUSE:	307 258 7315								
PUSHER:									

DATE SPUD DATE	6AM DEPTH
9/11/20044 8/16/2004	4640
REPORT NO.	24 HR FOOTAGE
26	116
DRLG CONTRACTOR	DAYS SINCE SPUD
Elenburg, Rig 12	26
CONSULTANT	AFE# API#
John C. Lamb	43-007-30718

ACTIVITY AT REPORT TIME:	DAILY COST		CUM COST		AFE COSTS	
Logging	\$	25,976	\$	805,428	\$	

CH	KONOLOC	T UF DAIL	Y OPERATIONS (06:00 - 06:00 HRS)	SLOW	PUMP RA	(TE DATA:			S WEIGHT INFO	
FROM	то	HOURS	Activity:	Depth	SPM	Pressure	Eff BHA Wt		Slackoff:	Hoisting:
(hrs)	(hrs)	(hrs)	rioditity.	4640	57	300	40,017	115,000	105,000	120,000
06:00	08:00	2.00	Pump 80 bbl viscous LCM pill, regain partial returns	- losing 100+ b	bl/hr, circu	lated viscous p	pill to reserve p	it		
08:00	08:30	0.50	Drill 4524 - 4530 at 90 SPM with partial returns - losi	ng 100 bbl/hr						
08:30	09:30	1.00	Refill pits							
09:30	10:30	1.00	Drill 4530 - 4546 at 90 SPM with partial returns - losi							
10:30	11:15	0.75	Refill pits, isolate suction and build viscous LCM pill	as before, rega	ined partia	l returns				
11:15	12:30	1.25	Drill 4546 - 4558 at 90 spm - losing 120 bbl/hr							
12:30	13:00	0.50	Refill pits, isolate suction and build viscous LCM pill							
13:00	22:45	9.75	Drill 4558 - 4640 at 90 SPM - losing 10 bbl/hr, regain	ed full returns l	oy 4568', ii	ncrementally in	ncreasing pump	rate to 118 S	PM by 4600', no	further losses
22:45	00:30	1.75	Short trip 19 stands into casing							
00:30	01:00	0.50	Circulate							
01:00	05:00	4.00	Trip out of hole for logs							
05:00	06:00	1.00	RU loggers, prepare to log well in one run					•		
			Note: lost an estimated cumulative of 400+ bbl water					·) (. I Promotion
									RECEN	VED
									DEC 13	2004
					-			DIV. O	FOIL, GAS	& MINING

	DAILY	CUM
DESC.	(hrs)	(hrs)
Drill	12.50	319.50
Trip	5.75	65.25
Circulate	0.50	9.25
Rig Repair		32.25
Rig Service		6.25
Dev Survey		4.75
NU/ND		21.00
Cement		2.50
Run Casing		8.00
woc		
OH Lagging	1.00	1.00
Mix Mud/LCM	4.25	4.25
MI & RU		6.00
RatHole		
Mause Hole		
Fishing		
Other		4.50
Coring		38.00
nspect BHA		
Cut drig line		1.75
Wash & Ream		1.25
Orill Cement		8.25
Test BOPE		6.50
woo		
PU/LD BHA		6.25
nsp circ equip		3.50
TOTALS	24.00	550.00

	SUMMARY OF DAILY & CUMULATIVE (cos	ſS			
COST CODE	DESCRIPTION OF DAILY COSTS		DAILY (\$)		CUM (\$)	AFE (S)
2030.010	Land, Legal, Title, Survey, Arch, Damages, Permits, Signs					
2030.031	Dirtwork, Road, Location, Pits, Liner					
2030.019	Contract Drilling 9480 / day 392.5 / h cond 5071 26,000 mob sfc 36791	\$	9,480	\$	311,432	
2032.001	Water	\$	1,215	\$	7,927	
2032.013	Drill Bits, Stabilizers, Reamers	\$	6,500	\$	49,000	
2031.046	Cementing and Services			\$	26,636	
2030,053	Coring and Analysis			\$	69,378	
2030.052	Logging					
2030.054	Mud Logging	\$	750	\$	14,650	
2030.037	Rental Equipment	\$	1,305	\$	40,880	
2030.028	Transportation	\$	3,158	\$	18,592	
2032.004	Mud and Chemicals	\$	2,768	\$	30,635	
	Directional Services, Mud Motors			\$	106.512	
	Intermediate casing			\$	70,415	
2030.035	Contract Labor			\$	9,010	
2030.022	Engineering / Supervision	\$	800	\$	20,800	
2030.099	Intangible Miscellaneous and Contingencies					
2040.001	Surface Casing			\$	17,790	
2040.004	Production Casing					
1011.000	Float Equipment, Shoes, Centralizers			\$	1,800	
1041.000	Wellhead Equipment			\$	9,971	
1073.000	Bottom Hole Pump / Gas Lift / Other					
1104.000	Drivehead, Engine / Motor and Hydraulic Pump / Electric Unit					
2040.052 / 2040.055	Valves and Fittings, Small / Large					
2040.067	Other Surface Equipment	1		_		
2040.099	Tangible Miscellaneous and Contingencies	1		-		
	TOTAL COSTS	\$	25,976	\$	805,428	s .

Report #	26	Date:	09/11/04		DAI	LY DR	ILLING	REPO	रा					Page 2
			Well Na	me:		Je	nsen 1-18	3						
					el desert		В	T RECOR	D			ria.		
BIT NO. (#)	BIT SIZE (in)	MFG	TYPE	SERIAL	JET8 (32/32/32)	DEPTH IN (R)	DEPTH OUT (N)	FOOTAGE DRILLED (ft)	CUM BIT HOURS (hrs)	ROP (ft/hr)	WoB (#%)	RPM MTR/TBL	BIT TORQUE (ft-lbs)	BIT GRADING In Out Dull Loc Seals Gge Dull Other
1	12 1/4	Security	XL18N	754840	14 / 14 / 14 / 16	494	1,799	1,305	102.75	12.7	36 - 43	45 / 60	2100 - 2900	6 7 WT ALL EFE 1/8 CI
2	12 1/4	Security	XL43	10408516		1,799	2,698	899	83.25	10.8	35 - 40	45 / 45-70	1400 - 2200	8 8 WT ALL FEF 1/8 BT ROP
3	12 1/4	Smith	F4	MT6085	18 / 18 / 18	2,698	3,522	824	83.25	9.9	35 - 40	45 / 60	1600 - 2550	8 8 WT ALL EEE1/2 RG TORQ
4	7 7/8	Smith	F57YOD	MT2530	12 / 13 / 12	3,522	4,156	634	68,50	9.3	23 - 28	55 - 60	1800 - 2400	4 4 WT ALLEEE in CP
CB1	7 7/8	Corion	CMF573			4,156	4,264	108	20.75	5.2	6 - 10	45 - 80	2500 - 3200	few broken cutters on inside gauge
CB2	7 7/8	Corion	CMR36			4,264	4,333	69	9.25	7.5	5	60 - 75	2600	21 broken cutters
5	7 7/8	RTC	HP61HK	PO9116	13 / 13 / 13	4,333	4,640	307	31,75	9.7	23 - 27	57 - 65	1900 - 2400	
COMM	ENTS	Bits 1,2&3 with s	hock sub, mud m	olor and dire	ctional tools; Bit 4 8	\$ 5 with shoc	k sub and no	mud motor						

REN	TAL	EQUIP	ME	NT
RENTAL	1000	DAILY		CUM
ITEM		COSTS		costs
		(\$)		(\$)
2 Living Qtrs	\$	315	\$	8,550
Frac Tank	\$	45	\$	1,160
Forklift	\$	60	\$	1,290
Portajohn	\$	20	\$	520
Mud Trailer	\$	50	\$	1,300
Mud Cleaner	\$	375	\$	10,750
EDR	\$	100	\$	2,600
Autodniller	\$	90	\$	2,150
RU mud cinr	T		\$	975
Driff collars			\$	5,585
Shock Sub	\$	250	\$	6,000
other	1			
other			Γ	
other				
other			Г	
other	1			
other				
other	Τ		1	
TOTALS	S	1,305	\$	40,880

	000000000000000000000000000000000000000					CASING D	ATA				
SIZE	WEIGHT	GRADE	CONN	DRIFTID	EXTERNAL COLLAPSE (psi)	INTERNAL YIELD (psi)	CAPACITY (bbs/ft)	LENGTH (ft)	TOP SET AT (ft)	BOTTOM SET AT (ft.KB)	
30*	NA	NA						40.00	0.00	40.00	
13 3/8"	54.5	J55	ST&C	12.459	1,130	2,730	0.15450	500.00	2.00	498.00	
8 5/8*	32	J55	ST&C	7.796	2,530	3,930	0.06090	3,545.00	0.00	3,520,00	

		100000000000000000000000000000000000000	AD SIZE	MAXIMUM O.D.	MINIMUM I.D.	LENGTH		HRS SINCE	
DESCRIPTION OF BHA	PROVIDER	вох	PIN	(in)	(In)	(ft)	HOURS RUN	INSPECTION	Market Control
Bit	RTC		4 1/2 R	7.875		1.00	110.25	110.25	
Bit sub	Rig	4 1/2 R	4 1/2 XH	6.250	2.500	2.90	110.25	110.25	
Griffith Shock Sub	Spidle	4 1/2 XH	4 1/2 XH	6,500	6.375	10.03	110.25	110.25	
17 - 6 1/2" Drill Collars	Rig	4 1/2 XH	4 1/2 XH	6.500	2.313	525.85	110.25	110.25	
2 - 4 1/2" HWDP	Rig	4 1/2 XH	4 1/2 XH	4,500	2.875	61.78	110.25	110.25	
		 -			+				

	7886566						DRILLIN	G MUD R	EPORT						
SAMPLE		MUD	FUNNEL			GEL	FILTRATE		CAKÉ		SAND				
DEPTH	TIME	WT.	VISCOSITY	PV/YP	KCL (%)	STRENGTH	API	CALCIUM (ppm)	THICKNESS (/32 in)	SOLIDS (% vol)	CONTENT (% vol)	pН	CHLORIDES (ppm)	ALKALINITY Pf/Mf	LCM lb/gal
4,325	(hh:mm) 16:00	(ppg) 8.40	(sec/qt) 27	1/0	(70)	0/0	NC NC	30	NC NC	0.0	0	8.0	4.000	0/4.4	Bicarbs 5368 mg / L
1,525		0.10	7:	- · · ·		-,-									

				D.A	ILY MUD	COST & I	NVENTOR'	Υ					
	BARITE (sx.)	QUICK GEL	CAUSTIC (sx.)	LIMÉ (sx.)	SODA ASH	UNIDRILL (ex.)	SOLKWICK	PAC-R	PHPA (gall)	CEDAR (sx.)	TRUCKING (\$)		TOTAL COSTS (\$)
UNIT COST													
STARTING INVENTORY	120												
INVENTORY RECEIVED													
USED LAST 24 HOURS													
ENDING INVENTORY													
DAILY MUD COST													1,593
PREVIOUS CUMULATIVE COST			The second second										31,810
CUMULATIVE MUD COST												Ĺ	33,403

MUD	GAS DATA (in L	Inits)	SHOW INTERN	VAL	RATE	OF PENETRATI	ON	1	SHOW GAS DA	TA		
BACK	CONIN	TRIP	FROM	TO	BEFORE	DURING	AFTER	BEFORE	DURING	AFTER	Formation Tops:	Price River 2100' Castlegate 3110'
BROUND	GAS	GA\$	(ft)	(ft)	(ft)	(R)	(8)	UNITS	LINITS.	UNITS		Blackhawk 3420', Aberdeen 4306'
50-75			4208	4306	10-14	2-3	6-8	65	1006	150	Sample percentages:	
	290		4502	4528	7	1	8	75	150	90	Sample Description:	Show Ss trnsl mg fri bri yel flor slow
			4560	4570	7	3.5	4.5	70	100	50	stmg yel ct	
											1	

							RVEYS	ON SUF	DEVIATI							
	DL Angle	Azimuth	Deviation	Depth	DL Angle	Azimuth	Deviation	Depth	DL Angle	Azimuth	Deviation	Depth	DL Angle	Azimuth	Deviation	Depth
	0.96	174.90	1.06	3103	0.66	147.80	2.27	2244	1.35	190.80	0.69	1407	0.19	184.79	1.03	538
	0.14	175.60	1.02	3133	1.11	156.50	2.24	2275	0.39	190.50	0.75	1438	0.76	189.53	1.22	566
	0.42	174.00	1.15	3165	0.64	158.70	2.06	2306	0.47	201.30	0.73	1468	0.17	186.87	1.20	602
	0.58	167.30	1.26	3196	0.13	157.60	2.05	2337	0.83	218.50	0.84	1499	0.21	188.91	1.25	633
	0.66	169.60	1.45	3226	0.73	163.20	1.95	2367	1.08	206.70	0.51	1532	0.68	180.49	1.34	664
	0.40	165.50	1.38	3257	1.62	170.70	1.48	2399	1.13	194.00	0.83	1563	0.26	180.29	1.26	695
	0.82	155.00	1.40	3288	0.87	170.10	1.22	2429	0.29	187.20	0.85	1595	0.36	175.88	1.32	727
	0.31	159.00	1.40	3320	0.84	171.70	0.96	2460	0.43	196.70	0.81	1626	0.89	164.40	1.34	757
	0.54	152.50	1.36	3350	0.01	171.90	0.96	2492	1.29	202.10	1.20	1657	0.12	162.92	1.33	787
	0.79	154.50	1.12	3381	0.17	171.20	0.91	2523	0.65	202.10	1.00	1688	0.68	156.82	1.48	817
\neg	0.33	159.80	1.09	3413	1.07	170.60	1.23	2553	1.23	179.00	0.88	1720	1.29	143.19	1.43	844
\exists	0.23	160.20	1.16	3443	0.62	163.70	1.10	2584	1.04	157.60	0.84	1751	1.88	137.08	0.84	876
	1.52	178.80	1.34	3472	0.80	157.40	1.30	2614	0.43	164.00	0.93	1782	0.51	130.59	0.71	907
\neg			1.50	3503	1.20	165.40	1.60	2644	1.06	149.00	1.12	1813	0.95	112.85	0.86	936
\neg			2.00	3596	0.18	163.70	1.58	2672	0.59	158,00	1.05	1844	1.04	107.94	0.50	971
\neg			2.25	3686	0.48	168.10	1.66	2703	0.83	146.50	1.18	1875	0.65	109.50	0.91	1034
- 12 8	and the party		2.50	3748	1.02	177.10	1.82	2734	0.54	152.00	1.30	1906	0.62	120.10	1.00	1066
TV.			3.00	3810	0.25	178.90	1.77	2764	1.59	156.00	1.75	1935	0.40	126.70	1,04	1097
	C S THER THE		3,00	3902	0.79	184.00	1.30	2826	0.50	161.00	1.70	1967	0.53	132.57	1.16	1128
\neg	_		3.75	3996	0.94	196.10	1.20	2856	0.39	158.40	1,61	1997	0.33	137.30	1.19	1159
ココク	DEC 1		4.125	4087	1.01	191.00	0.90	2887	1.12	164.20	1.91	2028	0.62	141.51	1.01	1191
7/	DEC 1		4.50	4335	0.72	205.80	0.90	2919	1.05	154.10	1.88	2060	1.48	165.70	0.76	1221
			4.88	4397	0.78	221.40	0.80	2951	0.26	155.20	1.95	2091	2.30	235.75	0.27	1252
			5.00	4492	0.56	224.80	0.96	2981	1.03	148,60	1.74	2120	0.51	203.90	0.30	1283
33.	JOF OIL, C	120			1.18	205.50	0.70	3013	0.86	145.10	1.99	2152	0.58	173.03	0.35	1314
	ht Oi Oim A	UI	· •		1.03	206.00	1.00	3042	0.13	145,10	2.03	2183	0.28	172.10	0.44	1346
\neg				-	0.86	191.10	1.00	3072	1.52	151.20	2.42	2213	0.30	163.30	0.50	1377

						P	UMP & C	RCULATI	NG DATA						
			LINER	STROKE	ASSUMED	PUMP		PUMP		CIRC	CLATING DETA	ILS		ANNULAR VE	LOCITY
MUC			SIZE	LENGTH	EFF	RATE	VC	LUMETRIC DA	TA	Standpipe	Motor	HP	DP	DC	
PUMPS	MAKE	MODEL	(In)	(in)	(%)	(spm)	(bbls/stk)	(bbls/min)	(gal/min)	(psi)	Differential	(Sq In)	(ft/min)	(ft/mln)	
NO. 1	National	7P50	6.25	7.75	95.00%	118	0.0736	8.25	347	1,210	no MM	3.09	200	429	
NO. 2											ĺ				
NO. 3							1								
COMBINED														1	

DIV. OF OIL GAS & MINING

EVERGREEN OPERATING, INC. DAILY DRILLING REPORT

RIG CONTACT IN	FORMATION:
OFFICE TRAILER / FAX:	970 942 7543
CONSULTANT HAND CELL:	303 913 1054
DOGHOUSE:	307 258 7315
PUSHER:	

DATE SPUD DATE	6AM DEPTH
9/12/20044 8/16/2004	4640
REPORT NO.	24 HR FOOTAGE
27	0
DRLG CONTRACTOR	DAYS SINCE SPUD
Elenburg, Rig 12	27
CONSULTANT	AFE# API#
John C. Lamb	43-007-30718

ACTIVITY AT REPORT TIME:

Laying down drill pipe after cementing liner

pally cost cum cost series

48,407 \$ 836,917 \$ -

СН	IRONOLOG	Y OF DAIL	Y OPERATIONS (06:00 - 06:00 HRS)	SLOW	PUMP RA	TE DATA:		STRIN	G WEIGHT INFO	ORMATION:
FROM (hrs)	TO (hrs)	HOURS (hrs)	Activity:	Depth	SPM	Pressure	Eff BHA Wt	Static: 78,000	Slackoff: 72,000	Hoisting: 82,000
06:00	09.00	3.00	Log well with one run: DIGL/CD/CN/GR/CAL/SP, logger	's TD 4636'	', logged we	II with no prot	olems			
09:00	09:30	0.50	Rig down loggers		,					
09:30	13:00	3.50	Trip in hole slowly, hole displaced and circulated with no	losses evi	dent					
13:00	13:45	0.75	Circulate to clean hole with full returns							
13:45	17:15	3.50	Trip out of hole							
17:15	18:00	0.75	Rig up to run casing							
18:00	01:45	7.75	Run 32 joints casing, pick up liner hanger, run 103 joints	drill pipe, i	no loss of fl	uid				
01:45	02:15	0.50	Circulate casing with 59 SPM at 70 psi with no loss of flu							
02:15	03:00	0.75	Set liner at 4638' with top of liner at 3176'							
03:00	04:00	1.00	Cement liner with 320 sx 50:50 poz, yield 1.22, 70 bbl s	lurry, mixed	at 14.35 lb	gal with 5.34	gal wtr/sx + 5%	salt + 2% m	icrobond + .6% F	Halad-322 + .2% versaset
			.25#/sx flocele, displaced with 78 bbl fresh water							
04:00	04:30	0.50	Unsting from liner, pull up 50' and displace all drilling flu	id and 15 b	bl cement t	reserve pit v	vith production	water		
04:30	05:00	0.50	RD cementers							
05:00	06:00	1.00	Lay down drill pipe							

										EIVED-
					.				DEC	1 3 2004
									DIV OF OIL	, GAS & MINING
									 .	
TOTAL	HOURS	24.00			11.00					

SUMMARY	OF RIG HC	URS
	DAILY	CUM
DESC.	(hrs)	(hrs)
Drill		319.50
Trip	8.00	73.25
Circulate	1.25	10.50
Rig Repair		32.25
Rig Service		6.25
Dev Survey		4.75
NU/ND		21.00
Cement	2.75	5.25
Run Casing	8.50	16.50
woc		
OH Logging	3.50	4.50
Mix Mud/LCM		4.25
MI & RU		6.00
RatHole		
Mouse Hole		
Fishing		
Other		4.50
Coring		38.00
Inspect BHA		
Cut drig line		1.75
Wash & Ream		1.25
Drill Cement		8.25
Test BOPE		6.50
woo		
PU/LD BHA		6.25
inspicinc equip		3.50
TOTALS	24.00	574.00

			DAILY	-	CUM		AFE	
COSTCODE	DESCRIPTION OF DAILY COSTS		(\$)		(\$)		(\$)	1939
2030.010	Land, Legal, Title, Survey, Arch, Damages, Permits, Signs		_	L.				
2030.031	Dirtwork, Road, Location, Pits, Liner							
2030.019	Contract Drilling 9480 / day 392.5 / h cond 5071 26,000 mob sfc 36791	\$	9,480	\$	320,912			
2032.001	Water	\$	1,200	\$	9,127			
2032.013	Drill Bits, Stabilizers, Reamers			\$	49,000			
2031.046	Cementing and Services	\$	12,504	\$	39,140			
2030.053	Coring and Analysis			\$	69,378			
2030.052	Logging	\$	4,500	\$	4,500			
2030.054	Mud Logging	\$	750	\$	15,400			
2030.037	Rental Equipment	\$	1,055	\$	41,935			
2030.028	Transportation			\$	18,592			
2032.004	Mud and Chemicals	\$	2,768	\$	30,635			
	Directional Services, Mud Motors			\$	106,512	l		
	Intermediate casing			\$	70,415			
2030.035	Contract Labor			\$	9,010			
2030.022	Engineering / Supervision	\$	800	\$	21,600			
2030.099	Intangible Miscellaneous and Contingencies							
2040.001	Surface Casing			\$	17,790			
1040.004	Production Liner 11.87/ft							
011.000	Float Equipment, Shoes, Centralizers, Liner hanger	\$	15,350	\$	3,000			
041,000	Wellhead Equipment			\$	9,971			
073.000	Bottom Hole Pump / Gas Lift / Other							
1104.000	Drivehead, Engine / Motor and Hydraulic Pump / Electric Unit							
040.052 / 2040.055	Valves and Fittings, Small / Large							
040.067	Other Surface Equipment	1						
040.099	Tangible Miscellaneous and Contingencies							
	TOTAL COSTS	s	48,407	s	836 917	s		-

Report#	27	Date:	09/12/04 Well Na	me:	DA	ILY DR	ILLING		RT						Page 2
			Well Na	me:				RECOR	D			- <u>-</u>			
BIT	BIT					DEPTH	DEPTH	FOOTAGE	CLAM BIT				BIT TORQUE	ыт	GRADING
NO.	SIZE	}		SERIAL	JETS	IN	out	DRILLED	HOURS	ROP (f/hr)	woB (ar≥)	RPM MTR/TBL	(N -1bm)	In Out Dull Loc 5	Seals Gge Dull Othe
	(In)	MFG	TYPE	754840	(32/32/32) 14 / 14 / 14 / 16	(R) 494	1,799	1,305	(hrs) :	12.7	36 - 43	45 / 60	2100 - 2900	6 7 WT ALL	
2	12 1/4 12 1/4	Security Security	XL18N XL43	10408516	18 / 18 / 18	1,799	2,698	899	83.25	10.8	35 - 40	45 / 45-70	1400 - 2200		FEF 1/8 BT ROP
3	12 1/4	Smith	F4	MT6085	18 / 18 / 18	2,698	3,522	824	83.25	9.9	35 - 40	45 / 60	1600 - 2550		EEE1/2 RG TORQ
4	7 7/8	Smith	F57YOD	MT2530	12 / 13 / 12	3,522	4,156	634	68.50	9.3	23 - 28	55 - 60 45 - 80	1800 - 2400	4 4 WT ALL	
CB1	7 7/8	Corion	CMF573			4,156	4,264	108	20.75	5.2 7.5	6 - 10 5	60 - 75	2600	21 broken cutters	
CB2	7 7/8	Corion	CMR36	PO9116	13 / 13 / 13	4,264 4,333	4,333	69 307	9.25 31.75	9.7	23 - 27	57 - 65	1900 - 2400	6 6 WT ALL	EEE 1/16 None 7
5	7 7/8 MENTS	RTC Bits 1 2&3 with	shock sub, mud mo												
										CASING D	ATA			 	
	AL EQUIP								EXTERNAL	INTERNAL			TOP	BOTTOM	:
RENTAL	COSTS	COSTS		SUZE	WEIGHT	GRADE	CONN	DRIPTID	COLLAPSE	YNELD	CAPACITY	LENGTH	SET AT	SET AT	
	(\$)	(\$)							(psl)	(psi)	(bbls/ft)	(R)	(4)	(A KB)	
Living Qins	\$ 315	\$ 8,865		30*	NA	NA.						40.00	0.00	40.00	
ac Tank	\$ 45	\$ 1,205		13 3/8*	54.5	J55	ST&C	12.459	1,130	2,730	0.15450	500.00 3,545.00	2.00 0.00	498.00 3,520.00	
nklift	\$ 60			8 5/8	32 17	J55 J55	ST&C ST&C	7.796 4.653	2,530 4,910	3,930 5,320	0.02320	1,451.54	3,176.00	4,638.00	
ntajohn	\$ 20 \$ 50	\$ 540 \$ 1,350		5 1/2"	17	333	3140	4.000	4,010	*					
id Trailer id Geaner	\$ 50 \$ 375	\$ 11,125	Γ		1 1 1 1		100	В	оттомно	LE ASSEN	IBLY				
in Cheaner IR	\$ 100	\$ 2,700	107	1,000	- 16.	5.1			4637	MAXIMUM	MINIMUM	15.00			
todniler	\$ 90	\$ 2,240							AD SIZE	O.D.	I.D.	LENGTH	l	HRS SINCE	
mud clar		\$ 975	DES	CRIPTION OF	ВНА	PROV		вох	PIN	(in)	(In)	1.00	110.25	INSPECTION 110.25	
il collars		\$ 5,585		Bit		R.		4.000	4 1/2 R 4 1/2 XH	7.875 6.250	2.500	1.00 2.90	110.25	110.25	
ock Sub	 	\$ 6,000		Bit sub	Ck	R	idte	4 1/2 R 4 1/2 XH	4 1/2 XH 4 1/2 XH	6,500	6.375	10.03	110.25	110.25	
er	ļ <u>.</u>	├		iffith Shock		Sp R		4 1/2 XH	4 1/2 XH	6.500	2.313	525.85	110.25	110.25	
er	 	 		- 4 1/2" HW		R		4 1/2 XH	4 1/2 XH	4.500	2.875	61.78	110.25	110.25	
er	 		<u> </u>			``								ļ	
ner	1														
161									ļ					ļ I	
ner	ļ.,				****						·				
TOTALS	\$ 1,055	\$ 41,935	L							L			<u> </u>		
ultys i	11.61	344.F 14						G MUD R							
SAMPLE		MUD	FUNNEL.			GEL	FLIRATE		CAKE	50UDS	SAND	pН	CHLORIDES	ALKALINITY	LCM
DEPTH	TIME	WT.	VISCOSITY	PV/YP	KCL (%)	STRENGTH (Ib/100 RZ)	API (ml/30 min)	CALCIUM (ppm)	THICKNESS (/32 in)	(% vel)	(% vol)	Pri	(ppm)	Pf/Mf	lb/gal
(k) 4,325	(hh:mm) 16:00	(PPG) 8.40	(sec/qt) 27	1/0	120	0/0	NC	30	NC	0.0	0	8.0	4,000	0 / 4.4	Bicarbs 5368 mg / L
4,020	10.00	1 0.40												ļ	
										L		<u> </u>	L		
******	7.55	1000 7.19	1800 - T. T. T. T. T. T. T. T. T. T. T. T. T.	W.J J	. W. 900.	DA	ILY MUD	COST & I	NVENTOR	Υ			446.00		
	in in the second	Taga in T		F											TOTAL
			BARITE	QUICK GEL	CAUSTIC	LIME	SODA ASH	UNIDRILL	SOLKWICK	PACR	PHPA	CEDAR (#x)	TRUCKING (5)		COSTS (\$)
	gaçı yer	- 1	(sx)	(ex)	(sx)	(sx)	(sx)	(ex)	(sx)	(\$X.)	(gal)	, pan j			
TARTING INV	/ENTORY		120												
NVENTORY RE			120	 											
ISED LAST 24															
NDING INVEN												ļ.—		<i>~~~~~</i>	
AILY MUD CO							 	 -	 	<u> </u>	 	 			1,59
	MULATIVE COS	<u> </u>		1					 	L		 		1	33,40
CUMULATIVE	MOD COST			J									::	575555.71	sasa di Mari 19
					100 100			GGER R		TΔ	1				
BACK	GAS DATA (in		2.72.73.72								F		Price River	2100' Castlega	21101
	1		SHOW INTE	1		OF PENETRATI		BEFORE	SHOW GAS DA	AFTER	Formation '	iops:			(e 3110
GROUND .	CONN	Units) TRIP GAS	FROM	70	BEFORE (R)	DURING	AFTER	BEFORE	DURING UNITS		romation	lops:		3420', Aberdee	
GROUND 50-75	1	TRIP		1	BEFORE			UNITS 65	DURING UNITS 1006	AFTER UNITS 150	Sample per	centages:	Blackhawk	3420', Aberdee	n 4306'
	CONN	TRIP	FROM (ft) 4208 4502	70 (%) 4306 4528	BEFORE (R) 10-14 7	(R) 2-3	AFTER (%) 6-8 8	UNITS 65 75	DURING UNITS 1006 150	AFTER UNITS 150 90	Sample per Sample Desc	centages: ription:	Blackhawk		n 4306'
	CONN GAS	TRIP	FROM (ft) 4208	70 (%) 4306	BEFORE (R) 10-14	DURING (R) 2-3	AFTER (%) 6-8	UNITS 65	DURING UNITS 1006	AFTER UNITS 150	Sample per	centages: ription:	Blackhawk	3420', Aberdee	n 4306'
	CONN GAS	TRIP	FROM (ft) 4208 4502	70 (%) 4306 4528	BEFORE (R) 10-14 7	(R) 2-3	AFTER (%) 6-8 8	UNITS 65 75	DURING UNITS 1006 150	AFTER UNITS 150 90	Sample per Sample Desc	centages: ription:	Blackhawk	3420', Aberdee	n 4306'
	CONN GAS	TRIP	FROM (ft) 4208 4502	70 (%) 4306 4528	BEFORE (R) 10-14 7	(R) 2-3	AFTER (%) 6-8 8	UNITS 65 75	DURING UNITS 1006 150	AFTER UNITS 150 90	Sample per Sample Desc	centages: ription:	Blackhawk	3420', Aberdee	n 4306'
	CONN GAS	TRIP	FROM (ft) 4208 4502	70 (%) 4306 4528	BEFORE (R) 10-14 7	(R) 2-3	AFTER (%) 6-8 8	65 75 70	DURING UNITS 1006 150 100	AFTER UNITS 150 90	Sample per Sample Desc	centages: ription:	Blackhawk	3420', Aberdee	n 4306'
50-75	GAS 290	TRIP GAS	FROM (ft) 4208 4502 4560	TO (8) 4306 4528 4570	BEFORE (R) 10-14 7 7	DURING (R) 2-3 1 3.5	AFTER (%) 6-8 8 4.5	65 75 70 70	DURING UNITS 1006 150 100	AFTER UNITS 150 90 50	Sample per Sample Desc	centages: ription:	Blackhawk	3420', Aberdee	n 4306'
50-75	CONN GAS 290 Deviation	TRIP GAS	FROM (ft) 4208 4502	70 (%) 4306 4528	BEFORE (R) 10-14 7	(R) 2-3	AFTER (%) 6-8 8 4.5	65 75 70	DURING UNITS 1006 150 100 RVEYS	AFTER UNITS 150 90 50	Sample per Sample Desc String yel c	centages: ription: (Blackhawk Show Ss tr	3420°, Aberdeens I mg fri bri ye Azimuth 174.90	DL Angle
50-75	GAS 290	Azimuth 134.79 189.53	FROM (ft) 4208 4502 4560 DLAngle 0.19 0.76	To (8) 4306 4528 4570 Depth 1407 1438	BEFORE (R) 10-14 7 7 7 Deviation 0.69 0.75	DURING (R) 2-3 1 3.5 Azimuth 190.80 190.50	AFTER (8) 6-8 8 4.5 DEVIAT DL Angle 1.35 0.39	65 75 70 70 ION SU Depth 2244 2275	DURING UNITS 1006 150 100 RVEYS Deviation 2.27 2.24	AFTER UNTS 150 90 50 Azimuth 147.80 156.50	Sample per Sample Desc Stmg yel c	Depth 3103	Show Ss tr Deviation 1.06 1.02	3420°, Aberdeensl mg fri bri ye Azimuth 174,90 175.60	DL Angle 0.96 0.14
Depth 538 566 602	Deviation 1.03 1.22 1.20	Azimuth 184.79 199.53 186.87	PROM (t) 4208 4502 4560 DL Angle 0.19 0.76 0.17	70 (8) 4306 4528 4570 Depth 1407 1438 1468	Deviation 0.75 0.73	DURING (R) 2-3 1 3.5 Azimuth 190.80 190.50 201.30	AFTER (%) 6-8 8 4.5 DEVIAT DL Angle 1.35 0.39 0.47	65 75 70 10N SU Depth 2244 2275 2306	Duranto UNTS 1006 150 100 RVEYS Deviation 2.24 2.06	AFTER UNITS 150 90 50 Azimuth 147.80 156.50 158.70	Sample per Sample Desc String yel c	Depth 3103 3133 3165	Show Ss tr Deviation 1.06 1.02 1.15	3420', Aberdee nsl mg fri bri ye Azimuth 174.90 175.60 174.00	DL Angle 0.96 0.14 0.42
Depth 538 566 602 633	Deviation 1.03 1.22 1.20 1.25	Azimuth 184.79 189.53 186.87 183.91	PROM (ft) 4208 4502 4560 DL Angle 0.19 0.76 0.17 0.21	To (8) 4306 4528 4570 Depth 1407 1438 1468 1499	Deviation 0.69 0.75 0.84	DURING (R) 2-3 1 3.5 Azimuth 190.80 190.50 201.30 218.50	AFTER (8) 6-8 8 4.5 DEVIAT DL Angle 1.35 0.47 0.83	65 75 70 10N SU Depth 2244 2275 2306 2337	Duranto UNITS 1006 150 100 RVEYS Deviation 2.27 2.24 2.06 2.05	AFTER UNITS 150 90 50 Azimuth 147.80 156.50 158.70	Sample per Sample Desc String yel c DL Angle 0.66 1.11 0.64 0.13	Depth 3103 3185 3196	Blackhawk Show Ss tr Deviation 1.06 1.02 1.15 1.26	3420', Aberdee nsl mg fri bri ye Azimuth 174.90 175.60 174.00 167.30	DL Angle 0.96 0.14 0.42 0.58
50-75 Depth 538 566 602 633 664	Deviation 1.03 1.22 1.25 1.34	Azimuth. 184.79 199.53 186.87 180.49	PROM (N) 4208 4502 4560 DL Angle 0.19 0.76 0.17 0.21 0.88	To (8) 4306 4528 4570 Depth 1407 1448 1468 1499 1532	Deviation 0.69 0.75 0.34 0.51	2-3 1 3.5 Azimuth 190.80 190.50 201.30 218.50 206.70	AFTER (6) 6-8 8 4-5 DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08	0NTS 65 75 70 10N SU Depth 2244 2275 2306 2337 2367	During UNITS 1006 1500 1000 1000 1000 1000 1000 1000	AFTER UNITS 150 90 50 Azimuth 147.80 156.50 158.70 163.20	Sample per Sample Desc	Depth 3103 3135 3196 3226	Deviation 1.06 1.02 1.15 1.26 1.45	3420', Aberdee nsl mg fri bri ye Azimuth 174.90 175.60 174.00 167.30 169.60	DL Angle 0.96 0.14 0.42 0.58 0.66
50-75 Depth 538 566 602 633 664 695	Deviation 1.03 1.22 1.20 1.25 1.34 1.26	Azimuth 184.79 189.53 186.67 183.91 180.49	PROM (N) 4208 4502 4560 DL Angle 0.19 0.76 0.17 0.21 0.68 0.26	To (K) 4306 4528 4528 4570 Depth 1407 1438 1468 1498 1532 1563	Deviation 0.69 0.75 0.74 0.75 0.75 0.75 0.83	DURING (R) 2-3 1 3.5 Azimuth 190.80 190.50 201.30 218.50 206.70 194.00	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13	0815 65 75 70 10N SU Depth 2244 2275 2306 2337 2367 2399	DUPING UNITS 1006 150 150 100 100 100 100 100 100 100 100	AFTER UNITS 150 90 50 Azimuth 147.80 156.50 158.70	Sample per Sample Desc String yel c DL Angle 0.66 1.11 0.64 0.13	Depth 3103 3185 3196	Blackhawk Show Ss tr Deviation 1.06 1.02 1.15 1.26	3420', Aberdee nsl mg fri bri ye Azimuth 174.90 175.60 174.00 167.30	DL Angle 0.96 0.14 0.42 0.58
Depth 538 566 602 633 664 695 727	Deviation 1.03 1.20 1.25 1.34 1.32	Azimuth 184.79 189.53 186.67 180.49 180.29 175.88	PROM (N) 4208 4502 4560 DL Angle 0.19 0.76 0.17 0.21 0.88	To (8) 4308 4528 4570 Depth 1407 1438 1468 1499 1532 1563	Deviation 0.69 0.73 0.34 0.51 0.83 0.35	DURING (R) 2-3 1 3.5 Azimuth 190.80 201.30 201.30 218.50 206.70 194.00 187.20	AFTER (6) 6-8 8 4-5 DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08	0NTS 65 75 70 10N SU Depth 2244 2275 2306 2337 2367	During UNITS 1006 1500 1000 1000 1000 1000 1000 1000	Arter UNTS 150 90 50 50 Azimuth 147.80 156.50 157.60 163.20 170.70	Sample per Sample Desc Sample Desc String yel c String yel c DL Angle 0.68 1.11 0.64 0.13 0.73 1.62	Depth 3103 3133 3165 3226 3257	Deviation 1.06 1.02 1.15 1.26 1.38	3420', Aberdee nsl mg fri bri ye Azimuth 174.90 175.60 174.00 167.30 168.60 155.50	DL Angle 0.96 0.14 0.42 0.53 0.86 0.40
50-75 Depth 538 566 602 633 664 695 727 757	Deviation 1.03 1.22 1.20 1.25 1.34 1.34 1.34	Azimuth 184.79 189.53 186.67 183.91 180.49	PROM (ft) 4205 4502 4560 DL Angle 0.19 0.76 0.17 0.21 0.88 0.26 0.36	To (K) 4306 4528 4528 4570 Depth 1407 1438 1468 1498 1532 1563	Deviation 0.69 0.75 0.74 0.75 0.75 0.75 0.83	DURING (R) 2-3 1 3.5 Azimuth 190.80 190.50 201.30 218.50 206.70 194.00	DEVIAT DL Angle 1.35 0.39 0.47 0.03 1.08 1.13 0.29	0815 65 75 70 10N SU Depth 2244 2275 2306 2337 2399 2429	DUTING UNITS 1006 150 100 100 100 RVEYS Deviation 2.27 2.26 2.05 1.95 1.48 1.22	Azimuth: 147.80 156.90 Azimuth: 147.80 156.70 157.90 163.20 170.70	Sample per	Depth 3103 3133 3165 3196 3257 3286	Deviation 1.06 1.02 1.15 1.26 1.45 1.38 1.40	3420', Aberdee nsl mg fri bri ye Azimuth 174,90 175,60 174,00 167,30 189,60 155,50 155,00	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54
Depth 538 566 602 633 664 695 727	Deviation 1.03 1.20 1.25 1.34 1.32	Azimuth 134.79 189.53 186.67 180.49 180.29 175.88 164.40	PROM (n) 4208 4502 4560 DL Angle 0.19 0.76 0.17 0.21 0.88 0.26 0.36 0.89 0.12 0.68	70 (8) 4308 4528 4570 Depth 1407 1438 1468 1499 1532 1595 1826 1826 1837 1888	Deviation (%) 10-14 7 7 7 7 Deviation (%) 0.69 0.75 0.73 0.34 0.51 0.83 0.85 0.81 1.20 1.00	Azimuth 190.80 190.50 201.00 187.20 196.70 202.10 202.10 202.10 202.10 202.10 202.10 202.10 202.10 202.10	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65	0819 65 75 70 10N SU Depth 2244 2275 2306 2337 2399 2429 2469 2492 2492 2523	DEFINIS UNITS 1006 150 1006 150 1006 150 1000 1000 10	Asimuth 147.80 155.50 170.10 171.70 171.20 171.20	Sample per Sam	Depth 3103 3165 3196 3226 3220 3350 3381	Deviation	3420', Aberdee nsl mg fri bri ye Azimuth 174.90 175.60 174.00 167.30 169.60 155.00 155.00 155.00 152.50 154.50	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79
50-75 Depth 538 566 602 633 664 695 727 757 787 817 844	Deviation 1.03 1.22 1.20 1.25 1.34 1.26 1.34 1.36 1.33 1.48 1.43	Azimuth 184.79 189.53 186.87 180.49 180.29 175.88 164.40 162.92 143.19	DL Angle 0.19 0.76 0.17 0.21 0.68 0.36 0.89 0.12 0.68	70 (8) 4308 4528 4570 Pepth 1407 1438 1468 1499 1532 1583 1583 1583 1628 1628 1637	Deviation 0.69 0.75 0.51 0.83 0.85 0.81 1.20 0.68	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 196.70 202.10 202.10 179.00	DEVIAT DL Angle 1.35 0.39 0.47 0.63 1.08 1.13 0.29 0.43 1.29 0.65 1.23	CNTS 65 75 70 CON SU Depth 2244 2275 2306 2337 2367 2367 2429 2460 2492 2523 2553	Devino (NATS) 1006 150 1000 1000 1000 1000 1000 1000	Asimuth: 147.80 156.90 157.00 158.70 157.00 163.20 170.70 171.70 171.90 171.60	DL Angle DL Angle 0.66 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17	Depth 3103 3133 3165 3226 3226 3320 3350 3331 3413	Deviation 1.08 1.02 1.15 1.38 1.40 1.40 1.36 1.12 1.15 1.36 1.12 1.10 1.	3420', Aberdee nsl mg fri bri ye Azimuth 174,90 175,60 174,00 167,30 169,60 165,50 155,00 155,00 152,50 153,00 154,50 154,50 159,80	DL Angle 0.96 0.14 0.42 0.53 0.66 0.40 0.82 0.31 0.54 0.79 0.33
50-75 Depth 538 566 602 633 664 695 727 787 817 844 876	Deviation 1.03 1.22 1.20 1.26 1.34 1.34 1.33 1.48 1.43 0.84	Azimuth 184.79 189.53 186.67 180.49 180.29 175.88 164.90 162.92 155.82 143.19 137.08	PROM (N) 4208 4502 4560 DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.38 0.89 0.12 0.68 1.29	70 (8) 4308 4528 4570 1407 1433 1463 1595 1563 1595 1826 1857 1888 1720 1751	Deviation 7 7 7 7 Peviation 0.89 0.75 0.73 0.84 0.51 0.83 0.35 0.31 1.20 1.00 0.88 0.84	Azimuth 190.80 190.50 201.30 218.70 194.00 187.20 196.70 202.10 202.10 179.00 157.60	AFTER (8) 6-6 8 4.5 DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.13 0.29 0.45 1.29 0.65 1.23 1.04	CNTS 65 75 70 Pepth 2244 2275 2306 2337 2399 2429 2429 2492 2523 2553	Deviation 1006 150 1006 150 1006 150 1000 1000 10	Azimuth. 147.80 156.50 158.70 158.70 170.70 171.70 171.90 171.20 170.87 183.70	DL Angle Osc String yel c String yel c String yel c String yel c Osc Strin	Depth 3103 3133 3165 3226 3257 3288 3350 3361 3413 3443	Deviation	3420', Aberdee nsl mg fri bri ye Azimuth 174.90 175.60 174.00 167.30 168.60 165.50 155.00 152.50 154.50 159.80 169.80	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
Depth 538 566 602 633 664 695 727 757 787 817 844 876 907	Deviation 1.03 1.22 1.20 1.25 1.34 1.34 1.34 1.34 1.48 1.43 0.54 0.71	Azimuth 184.79 189.53 186.87 180.49 180.49 175.88 164.40 162.92 156.82 143.19 137.08 130.59	DL Angle 0.19 0.76 0.17 0.21 0.88 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51	70 (8) 4308 4528 4570 1407 1433 1468 1499 1532 1563 1595 1626 1626 1775 1888 1720 1751	Deviation (8) 10-14 7 7 7 7 7 Deviation 0.69 0.75 0.73 0.34 0.51 0.83 0.35 0.81 1.20 1.00 0.88 0.88 0.84 0.93	Azimuth 190.80 190.50 201.30 201.30 187.20 196.70 202.10 202.10 197.90 157.60 157.60 164.00	DEVIAT DL Angle 1.35 0.39 0.47 0.63 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04	CNTS 65 75 70 Depth 2244 2275 2306 2337 2399 2429 2460 2492 2523 2553 2554 2614	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.96 0.96 0.96 1.23 1.10 1.30	Azimuth. 147.80 155.90 157.80 158.20 170.70 170.70 171.70 171.90 171.20 175.60 163.70 163.70 163.70 163.70 163.70 163.70	DL Angle Osc String yel C String yel C String yel C Osc String yel C Osc String yel C Osc String yel C Osc String yel C Osc String yel C Osc String yel C Osc String yellow yello	Depth 3103 3133 3165 3196 3226 3257 3288 3320 3351 3413 3443 3472	Deviation 1.06 1.02 1.15 1.26 1.45 1.38 1.10 1.12 1.09 1.15 1.16 1.12 1.09 1.16 1.16 1.34	3420', Aberdee nsl mg fri bri ye Azimuth 174,90 175,60 174,00 167,30 169,60 165,50 155,00 155,00 152,50 153,00 154,50 154,50 159,80	DL Angle 0.96 0.14 0.42 0.53 0.66 0.40 0.82 0.31 0.54 0.79 0.33
50-75 Depth 538 566 602 633 664 695 727 757 787 817 844 876 907 938	Deviation 1.03 1.22 1.20 1.34 1.36 1.34 1.36 1.34 1.36 1.34 1.36 1.37 1.38 1.38 1.39 1.39 1.39 1.30 1.40 1.41 1.43 1.43 1.43 1.43 1.43 1.43 1.43	Azimuth 184.79 189.53 186.87 189.53 186.87 180.49 180.29 175.88 164.40 162.92 143.19 137.08 130.59 112.85	DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.89 0.12 0.68 1.29 1.58 0.95	70 (8) 4308 4528 4570 Depth 1407 1438 1449 1532 1563 1595 1826 1826 1720 1751 1782 1813	Deviation 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 8 8 9 9 9 9	Azimuth 190.80 190.50 201.30 210.50 201.30 210.50 206.70 194.00 187.20 196.70 202.10 202.10 179.00 157.60 164.00 149.00	DEVIAT DL Angle 1.35 0.39 0.47 0.03 1.08 1.13 0.29 0.43 1.23 1.04 0.43 1.06	0N SU Depth 2244 2275 2306 2337 2367 2399 2429 2420 2492 2450 2492 2523 2553 2584 2614 2644	RVEYS Deviation 2.27 2.24 2.06 1.95 1.95 1.48 1.22 0.96 0.96 0.91 1.23 1.10 1.30	Asimuth: 147.80 156.90 157.00 163.20 170.70 171.90 171.90 183.70 185.40	Sample per Sam	Depth 3103 3133 3165 3226 3227 3350 33413 3443 3472 3503	Deviation 1.08 1.02 1.15 1.38 1.40 1.36 1.15 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.15 1.16 1.15 1.	3420', Aberdee nsl mg fri bri ye Azimuth 174.90 175.60 174.00 167.30 168.60 165.50 155.00 152.50 154.50 159.80 169.80	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
50-75 Depth 538 566 602 633 664 695 727 757 787 817 814 876 907 936 971	Deviation 1.03 1.22 1.20 1.25 1.34 1.26 1.32 1.34 1.33 1.48 1.43 0.84 0.71 0.86	Azimuth 184.79 189.53 186.87 180.91 180.92 175.88 164.90 162.92 156.82 143.19 137.08 130.59 112.85 107.94	DL Angle 0.19 0.76 0.17 0.21 0.88 0.26 0.36 0.89 0.12 0.68 1.29 1.88 0.51	70 (8) 4308 4528 4570 1407 1433 1468 1499 1532 1563 1595 1626 1626 1775 1888 1720 1751	Deviation (8) 10-14 7 7 7 7 7 Deviation 0.69 0.75 0.73 0.34 0.51 0.83 0.35 0.81 1.20 1.00 0.88 0.88 0.84 0.93	Azimuth 190.80 190.50 201.30 201.30 187.20 196.70 202.10 202.10 197.90 157.60 157.60 164.00	DEVIAT DL Angle 1.35 0.39 0.47 0.63 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04	CNTS 65 75 70 Depth 2244 2275 2306 2337 2399 2429 2460 2492 2523 2553 2554 2614	RVEYS Deviation 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.96 0.96 0.96 1.23 1.10 1.30	Azimuth. 147.80 155.90 157.80 158.20 170.70 170.70 171.70 171.90 171.20 175.60 163.70 163.70 163.70 163.70 163.70 163.70	DL Angle Osc String yel C String yel C String yel C Osc String yel C Osc String yel C Osc String yel C Osc String yel C Osc String yel C Osc String yel C Osc String yellow yello	Depth 3103 3133 3165 3196 3226 3257 3288 3320 3351 3413 3443 3472	Deviation 1.06 1.02 1.15 1.26 1.45 1.38 1.10 1.12 1.09 1.15 1.16 1.12 1.09 1.16 1.16 1.34	3420', Aberdee nsl mg fri bri ye Azimuth 174.90 175.60 174.00 167.30 168.60 165.50 155.00 152.50 154.50 159.80 169.80	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
50-75 Depth 538 566 602 633 664 695 727 757 787 817 844 876 907 938	Deviation 1.03 1.22 1.20 1.34 1.36 1.34 1.36 1.34 1.36 1.34 1.36 1.37 1.38 1.38 1.39 1.39 1.39 1.30 1.40 1.41 1.43 1.43 1.43 1.43 1.43 1.43 1.43	Azimuth 184.79 189.53 186.87 189.53 186.87 180.49 180.29 175.88 164.40 162.92 143.19 137.08 130.59 112.85	PROM (N) 4208 4502 4560 DL Angle 0.19 0.76 0.17 0.21 0.68 0.26 0.38 0.12 0.68 1.29 1.88 0.51 0.95 1.04	70 (8) 4308 4528 4570 1407 1438 1468 1499 1532 1563 1595 1826 1827 1888 1720 1751 1782 1381 1381 1381	Deviation 7 7 7 Deviation 0.69 0.75 0.73 0.84 0.51 1.20 1.00 0.88 0.84 0.93 1.12 1.05	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 157.60 157.60 158.00 1	AFTER (%) 6-6 8 4.5 DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.65 1.23 1.04 0.43 1.06 0.59	CNTS 65 75 70 Pepth 2244 2275 2306 2337 2399 2429 2429 2492 2523 2584 2614 2644 2672	Devino (NATS) 1006 150 1000 1000 1000 1000 1000 1000	Azimuth: 147.80 156.50 157.00 156.50 157.00 170.70 171.70 171.90 163.70 157.40 163.70	Sample per Sample Desc	Depth 3103 3133 3165 3226 3227 3288 3350 3361 3443 3443 3453 3596	Deviation 1.08 1.02 1.15 1.38 1.40 1.36 1.15 1.16 1.16 1.16 1.16 1.17 1.17 1.18 1.17 1.18 1.17 1.18 1.	3420', Aberdee nsl mg fri bri ye Azimuth 174.90 175.60 174.00 167.30 168.60 165.50 155.00 152.50 154.50 159.80 169.80	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
50-75 Depth 538 566 602 633 664 695 727 757 787 817 844 876 907 936 971 1034	Deviation 1.03 1.22 1.20 1.25 1.34 1.33 1.46 1.43 0.54 0.71 0.86 0.50 0.91	Azimuth. 184.79 189.53 188.91 180.49 180.49 175.88 164.40 162.92 175.82 143.19 137.08 130.59 112.85	PROM (N) 4208 4502 4560 51 50 51 50 55 50 662 0.40	70 (8) 4306 4528 4570 1407 1407 1408 1499 1532 1626 1957 1626 1775 1 1782 1813 1844 1875	Deviation (%) (%) (%) (%) (%) (%) (%) (%) (%) (%)	Azimuth 190.80 190.50 201.30 218.50 201.30 218.50 206.70 194.00 187.20 196.70 202.10 179.00 157.60 164.00 149.00 149.00	AFTER (%) 6-6 8 4-5 DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.65 1.23 1.04 0.43 1.04 0.43 1.06 0.59 0.83 0.54	CNTS 65 75 70 200 SU Depth 2244 2275 2306 2337 2399 2429 2492 2523 2584 2614 2672 2703 2734 2764	RVEYS 1006 150 1000 150 1000 150 1000 150 1000	Azimuth: 147.80 150.0 150.0 156.50 157.00 163.20 170.70 171.90 171.70 171.90 163.70 163.70 163.70 163.70	DL Angle 0.68 1.11 0.64 0.13 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.80 1.20 0.18 0.48 1.02 0.25	Depth. 3103 3133 3165 3196 3226 3257 2288 3320 3350 3381 3443 3472 3503 3596 3686 3748 3810	Deviation	3420', Aberdee nsl mg fri bri ye Azimuth 174.90 175.60 174.00 167.30 168.60 165.50 155.00 152.50 154.50 159.80 169.80	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
50-75 Depth 538 566 602 633 664 695 727 757 787 817 844 876 907 936 971 1034 1066 1097	Deviation 1.03 1.22 1.20 1.25 1.34 1.33 1.46 1.43 0.84 0.71 0.86 0.50 0.91 1.00 1.04 1.16	Azimuth. 184.79 189.53 188.97 180.49 180.49 180.29 175.88 164.40 162.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 128.70	DL Angle 0.19 0.76 0.38 0.26 0.38 0.26 0.38 0.59 0.112 0.68 1.29 0.51 0.95 1.04 0.65 0.62 0.40	70 (8) 4306 4528 4570 1407 1407 1408 1499 1532 1595 1626 1957 1751 1782 1813 1844 1875 1906 1937	Deviation (%) (%) (%) (%) (%) (%) (%) (%) (%) (%)	Azimuth 190.80 190.50 201.30 218.50 201.30 218.50 206.70 194.00 187.20 196.70 202.10 179.00 164.00 149.00 149.00 149.00 149.00 149.00 159.00 169.00 169.00 169.00	DEVIAT DL Angle 1.35 0.39 0.47 0.63 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 0.43 1.06 0.59 0.83 0.54	UNTS 65 75 70 Depth 2244 2275 2306 2337 2399 2429 2450 2492 2523 2553 2554 2614 2644 2672 2703 2734 2734	DEFINIS UNITS 1006 150 1006 150 1006 150 1000 1000 10	Azimuth. 147.80 155.90 150.00 157.60 158.20 170.70 170.10 171.20 170.60 163.20 157.40 163.70 163.70 163.70 163.70 163.70 163.70 188.10 177.10	DL Angle Desc String yel C Stri	Depth 3103 3133 3165 3226 3257 3288 3320 3350 3443 3472 3503 3566 3748 3810 3902	Deviation 1.08 1.02 1.15 1.26 1.45 1.40 1.10 1.	3420', Aberdee nsl mg fri bri ye Azimuth 174.90 175.60 174.00 167.30 168.60 165.50 155.00 152.50 154.50 159.80 169.80	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
50-75 Depth 538 566 602 633 664 695 727 757 787 841 876 907 936 971 1034 1066 1097 1128	Deviation 1.03 1.22 1.20 1.25 1.34 1.26 1.32 1.34 1.36 0.86 0.50 0.91 1.00 1.04 1.16 1.19	Azimuth 184.79 189.53 186.87 180.49 180.49 180.29 175.88 164.40 162.92 143.19 137.08 130.59 112.85 107.94 109.50 120.10 128.70 132.57 137.30	PROM (ft) 4208 4502 4560 4502 4560 510 510 510 510 510 510 510 510 510 51	70 (8) 4306 4528 4570 4528 4570 1407 1407 1433 1468 1595 1626 1657 1638 1720 1751 1782 1813 1844 1875 1906 1935 1967 1997	Deviation (%) 10-14 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	Azimuth 190.80 190.50 190.50 190.50 190.50 190.50 190.50 190.50 190.50 190.50 190.70 194.00 197.20 196.70 202.10 202.10 197.20 196.70 197.50	DEVIAT DL Angle 1.35 0.39 0.47 0.63 1.08 1.13 0.29 0.43 1.23 1.04 0.43 1.06 0.59 0.83 1.06 0.59 0.83 0.83 0.99 0.99 0.99 0.99 0.99 0.99 0.99 0.9	CHTS 65 75 70 CHON SU Depth 2244 2275 2306 2337 2367 2399 2429 2460 2492 2523 2553 2554 2614 2644 2672 2703 2734 2764 2826 2856	RVEYS 1006 150 1000 150 1000 RVEYS 2.27 2.24 2.06 2.05 1.95 1.48 2.09 1.92 0.96 0.96 0.96 1.23 1.10 1.30 1.50 1.58 1.66 1.82 1.77 1.30	Armeth 147.80 155.70 177.10 177.90 184.00 199.10	Sample per Sam	Depth 3103 3133 3165 3226 3257 3286 3320 3350 3413 3443 3472 3503 3596 3748 3810 3996	Deviation 1.08 1.02 1.15 1.26 1.45 1.38 1.40 1.16 1.16 1.16 1.16 1.16 1.16 1.17 1.16 1.17 1.18 1.	3420', Aberdee nsl mg fri bri ye Azimuth 174.90 175.60 174.00 167.30 168.60 165.50 155.00 152.50 154.50 159.80 169.80	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
50-75 Depth 538 566 602 633 664 695 727 787 817 844 876 907 936 971 1034 1066 1097 1128 1159	Deviation 1.03 1.22 1.20 1.25 1.34 1.26 1.32 1.34 1.30 1.43 0.84 0.71 0.86 0.50 0.91 1.00 1.04 1.16 1.19 1.01	Azimuth 184.79 189.53 186.87 189.53 186.87 180.49 180.29 175.88 164.40 162.92 156.82 143.19 137.08 130.59 107.94 109.50 120.10 126.70 132.57 137.30 141.51	PROM (N) 4208 4502 4560 51	70 (8) 4308 4528 4570 Depth 1407 1438 1468 1499 1532 1583 1583 1720 1751 1782 1813 1844 1875 1906 1935 1967 1997 2028	Deviation (8) 10-14 7 7 7 7 7 Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.18 1.30 1.75 1.70 1.70 1.70 1.61	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 157.60 158.00 156.00 156.00 156.00 156.00 156.00 156.00 156.00 158.00 158.00 158.00 158.00 158.00 158.00 158.00 158.00 159.00 1	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 0.43 1.09 0.59 0.83 0.54 1.59 0.50 0.39	UNTS 65 75 70 10N SU Depth 2244 2275 2306 2337 2399 2429 2492 2523 2584 2614 2672 2703 2734 2764 2826 2837	RVEYS 1006 150 1000 150 1000 150 1000 150 1000	Asimuth: 147.80 156.50 157.00 163.20 170.70 171.90 163.70 163.70 171.90 171.90 171.90 177.10 178.90 184.00	Sample per Sample per Sample per Sample Desc String yel c String yel	Depth 3103 3133 3165 3226 3257 3288 3320 3350 3351 3413 3443 3472 3503 3596 3686 3748 3810 3902 3996 4007	Deviation	3420', Aberdee nsl mg fri bri ye Azimuth 174.90 175.60 174.00 167.30 168.60 165.50 155.00 152.50 154.50 159.80 169.80	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
50-75 Depth 538 566 602 633 664 695 727 757 817 844 876 907 936 971 1034 1066 1097 1128 1159 1191	Deviation 1.03 1.22 1.20 1.25 1.34 1.25 1.34 1.48 0.71 0.86 0.50 0.91 1.00 1.04 1.18 1.19 1.01 0.76	Azimuth. 184.79 189.53 188.91 180.49 180.49 175.88 164.40 162.92 175.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 123.257 137.30 141.51 165.70	DL Angle 0.19 0.76 0.38 0.59 0.112 0.68 1.29 0.51 0.65 0.51 0.95 0.05 0.62 0.40 0.53 0.33 0.62	70 (8) 4308 4528 4570 1407 1407 1407 1408 1595 1626 1957 1688 1720 1751 1782 1813 1844 1875 1906 1935 1967 1997 2006	Deviation (%) 10-14 7 7 7 7 7 7 7 7 7 7 7 0.69 0.75 0.84 0.51 0.83 0.35 0.81 1.20 1.00 0.88 0.93 1.12 1.05 1.18 1.30 1.75 1.76 1.70 1.61 1.91	Azimuth 190.80 190.50 201.30 218.50 201.30 218.50 206.70 194.00 187.20 196.70 202.10 179.00 164.00 149.00 155.60 155.00 155.00 155.00 155.00 155.00 155.40 156.40 156.40	DEVIAT DL Angle 1.35 0.39 0.47 0.63 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 0.43 1.06 0.59 0.83 0.54 1.59 0.50 0.39 1.12	CNTS 65 75 70 200 SU Depth 2244 2275 2306 2337 2399 2429 2460 2492 2523 2554 2614 2644 2672 2703 2734 2826 2826 2837 2919	RVEYS 1006 150 1000 150 1000 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.98 0.96 0.91 1.23 1.10 1.30 1.60 1.55 1.66 1.82 1.77 1.730 1.20 0.90	Azimuth. 147.80 150.90 150.00 150.00 150.00 150.00 150.00 150.00 150.00 170.10 171.70 170.70 170.70 183.70 183.70 183.10 177.10 177.90 183.10 184.00 198.10 198.10 199.10	Sample per Sample Desc. String yel c String yel c String yel c 0.68 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.80 1.20 0.18 0.48 1.02 0.25 0.79 0.94 1.01 0.72	Depth 3103 3133 3165 3196 3226 3257 3288 3320 3350 3350 3413 3472 3596 3686 3748 3610 3902 3998 4067 4335	Deviation 1.08 1.02 1.15 1.28 1.40 1.38 1.40 1.36 1.12 1.09 1.16 1.34 1.50 2.00 2.25 2.50 3.00 3.75 4.125 4.50 4.125 4.50 4.50 4.125 4.125 4.50 4.125	3420', Aberdee nsl mg fri bri ye Azimuth 174.90 175.60 174.00 167.30 168.60 165.50 155.00 152.50 154.50 159.80 169.80	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
50-75 Depth 538 566 602 633 664 695 727 757 787 817 844 876 907 936 971 1034 1066 1097 1128 1159 1191 1221	Deviation 1.03 1.22 1.20 1.25 1.34 1.26 1.32 1.34 1.36 1.43 0.84 0.71 0.86 0.50 0.91 1.00 1.04 1.16 1.19 1.01 0.76 0.27	Azimuth 184.79 189.53 186.87 180.49 180.49 180.29 175.88 164.40 162.92 175.85 175.95 1	PROM (th) (4208 4502 4560 4502 4560 510 510 510 510 510 510 510 510 510 51	70 (8) 4306 4528 4570 4528 4570 1407 1407 1407 1433 1468 1592 1583 1595 1826 1657 1720 1751 1782 1813 1544 1875 1906 1935 1997 2028 2060 2091	Deviation (%) 10-14 7 7 7 7 7 7 7 7 7 Deviation (%) 0.68 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.18 1.30 1.75 1.76 1.77 1.61 1.91 1.88	Azimuth	DEVIAT DL Angle 1.35 0.39 0.47 0.63 1.08 1.13 0.29 0.43 1.23 1.04 0.43 1.29 0.65 1.23 1.04 0.43 1.106 0.59 0.83 1.06 0.59 0.83 0.54 1.59 0.83 0.54 1.59 0.83 0.54 1.59 0.50 0.39	CHTS 65 75 70 CHON SU Depth 2244 2275 2306 2337 2367 2399 2429 2460 2492 2523 2553 2554 2614 2644 2672 2703 2734 2764 2826 2856 2857 2819	RVEYS 1006 150 1000 RVEYS 227 224 206 205 1.95 1.48 1.22 0.96 0.96 0.96 1.123 1.10 1.58 1.66 1.82 1.77 1.30 1.00 0.90 0.90	Armeth 147.80 155.50 157.40 163.70 177.10 177.90 184.00 198.10 19	Sample per Sam	Depth 3103 3133 3165 3226 3257 3286 3320 3350 3413 3442 3503 3596 3748 3810 3998 4087 4387	Deviation 1.08 1.02 1.15 1.26 1.45 1.38 1.40 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.17 1.18 1.	3420', Aberdee nsl mg fri bri ye Azimuth 174.90 175.60 174.00 167.30 168.60 165.50 155.00 152.50 154.50 159.80 169.80	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.52 0.31 0.54 0.79 0.33 0.23
50-75 Depth 538 566 602 633 664 695 727 757 787 817 817 1034 1097 1128 1159 1159 1221 1252	Deviation 1.03 1.22 1.20 1.25 1.34 1.26 1.32 1.34 1.36 1.39 1.48 1.43 0.84 0.71 1.00 1.04 1.16 1.19 1.01 0.76 0.27 0.30	Azimuth 184.79 189.53 186.87 189.53 186.87 180.49 180.29 175.88 164.40 162.92 175.88 164.31 175.88 162.70 175.87 1	PROM (N) 4208 4502 4560 4502 4560 51	70 (8) 4308 4528 4570 1407 1407 1438 1468 1499 1532 1563 1595 1626 1657 1818 1844 1875 1906 1935 1967 1997 2028 2060 2091 2120	Deviation (8) 10-14 7 7 7 7 7 7 Deviation 0.69 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.18 1.30 1.75 1.70 1.70 1.61 1.91 1.88 1.95 1.74	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 157.60 164.00 156.00 156.00 156.00 156.00 156.00 156.00 156.00 156.20 1	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.43 1.29 0.65 1.23 1.04 0.43 1.29 0.65 1.23 1.04 0.43 1.09 0.85 1.23 1.04 0.43 1.09 0.85 1.23 1.04 0.43 1.05 0.80 0.80 0.80 0.80 0.80 0.80 0.80 0	UNTS 65 75 70 10N SU Depth 2244 2275 2306 2337 2399 2429 2492 2523 2564 2614 2672 2703 2734 2764 2826 2837 2991	RVEYS 1006 150 1000 150 1000 150 1000 150 1000	Azimuth. 147.80 150.90 150.00 150.00 150.00 150.00 150.00 150.00 150.00 170.10 171.70 170.70 170.70 183.70 183.70 183.10 177.10 177.90 183.10 184.00 198.10 198.10 199.10	Sample per Sample Desc. String yel c String yel c String yel c 0.68 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 1.07 0.62 0.80 1.20 0.18 0.48 1.02 0.25 0.79 0.94 1.01 0.72	Depth 3103 3133 3165 3196 3226 3257 3288 3320 3350 3350 3413 3472 3596 3686 3748 3610 3902 3998 4067 4335	Deviation 1.08 1.02 1.15 1.28 1.40 1.38 1.40 1.36 1.12 1.09 1.16 1.34 1.50 2.00 2.25 2.50 3.00 3.75 4.125 4.50 4.125 4.50 4.50 4.125 4.125 4.50 4.125	3420', Aberdee nsl mg fri bri ye Azimuth 174.90 175.60 174.00 167.30 168.60 165.50 155.00 152.50 154.50 159.80 169.80	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
50-75 Depth 538 566 602 633 664 695 727 757 787 817 844 876 907 936 971 1034 1066 1097 1128 1159 1191 1221 1252	Deviation 1.03 1.22 1.20 1.25 1.34 1.26 1.32 1.34 1.36 1.43 0.84 0.71 0.86 0.50 0.91 1.00 1.04 1.16 1.19 1.01 0.76 0.27	Azimuth 184.79 189.53 186.87 180.49 180.49 180.29 175.88 164.40 162.92 175.85 175.95 1	PROM (th) (4208 4502 4560 4502 4560 510 510 510 510 510 510 510 510 510 51	70 (8) 4306 4528 4570 1407 1407 1407 1408 1595 1626 1957 1688 1720 1751 1782 1813 1844 1875 1906 1997 2028 2060 2091 2152	Deviation (%) 10-14 7 7 7 7 7 7 7 7 7 Deviation (%) 0.68 0.75 0.73 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.84 0.93 1.12 1.05 1.18 1.30 1.75 1.76 1.77 1.61 1.91 1.88	Azimuth	DEVIAT DL Angle 1.35 0.39 0.47 0.63 1.08 1.13 0.29 0.43 1.23 1.04 0.43 1.29 0.65 1.23 1.04 0.43 1.106 0.59 0.83 1.06 0.59 0.83 0.54 1.59 0.83 0.54 1.59 0.83 0.54 1.59 0.50 0.39	CHTS 65 75 70 CHON SU Depth 2244 2275 2306 2337 2367 2399 2429 2460 2492 2523 2553 2554 2614 2644 2672 2703 2734 2764 2826 2856 2857 2819	RVEYS 1006 150 1000 RVEYS 227 224 206 205 1.95 1.48 1.22 0.96 0.96 0.96 1.123 1.10 1.58 1.66 1.82 1.77 1.30 1.00 0.90 0.90	Asimuth: 147.80 150.90 150.156.50 158.70 157.60 163.20 170.10 171.70 171.90 163.70	Sample per Sample Desc String yel c String y	Depth 3103 3133 3165 3226 3257 3286 3320 3350 3413 3442 3503 3596 3748 3810 3998 4087 4387	Deviation 1.08 1.02 1.15 1.26 1.45 1.38 1.40 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.17 1.18 1.	3420', Aberdee nsl mg fri bri ye Azimuth 174.90 175.60 174.00 167.30 168.60 165.50 155.00 152.50 154.50 159.80 169.80	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
50-75 Depth 538 566 602 633 664 695 727 757 817 844 876 907 936 971 1034 1066 1097 1128 1159 1159 11221 1252 1253 1314	Deviation 1.03 1.22 1.20 1.25 1.34 1.25 1.34 1.48 0.71 0.86 0.50 0.91 1.00 1.04 1.16 1.19 1.01 0.76 0.27 0.30 0.35	Azimuth. 184.79 189.53 188.91 180.49 180.29 175.88 164.40 182.92 156.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 126.70 132.57 137.30 141.51 165.70 235.75 233.90 173.03	DL Angle 0.19 0.76 0.38 0.59 0.112 0.68 1.29 0.51 0.65 0.51 0.95 1.44 2.30 0.51	70 (8) 4308 4528 4570 1407 1407 1438 1468 1499 1532 1563 1595 1626 1657 1818 1844 1875 1906 1935 1967 1997 2028 2060 2091 2120	Deviation (%) 10-14 7 7 7 7 7 7 7 7 7 7 7 0.69 0.75 0.84 0.51 0.83 0.85 0.81 1.20 1.00 0.88 0.93 1.12 1.00 1.18 1.30 1.75 1.76 1.70 1.61 1.91 1.88 1.95 1.99	Azimuth 190.80 190.50 201.30 218.50 201.30 218.50 206.70 194.00 187.20 196.70 202.10 202.10 179.00 146.50 146.50 155.00 161.00 158.40 164.50 154.00 154.10	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.65 1.23 1.04 0.43 1.06 0.59 0.83 0.54 1.59 0.50 0.39 1.12 1.05 0.26 1.05	CNTS 65 75 70 Pepth 2244 2275 2306 2337 2399 2429 2460 2492 2523 2534 2614 2642 2672 2703 2734 2826 2826 2826 2826 2826 2826 2826 282	RVEYS 1006 150 1000 150 1000 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.98 0.96 0.91 1.23 1.10 1.30 1.60 1.55 1.66 1.82 1.77 1.73 1.70 1.90 0.90 0.90 0.90 0.90 0.90	Azimuth. 147.80 150.90 150.90 150.90 150.90 150.90 150.90 150.90 150.90 170.70 170.70 171.90 171.90 171.90 171.90 183.70 183.70 183.40 185.40 185.40 185.40 185.40 185.40 196.10 197.10 198.10 199.10 199.10 205.80 221.40 224.50	Sample per Sample Desc	Depth 3103 3133 3165 3226 3257 3286 3320 3350 3413 3442 3503 3596 3748 3810 3998 4087 4387	Deviation 1.08 1.02 1.15 1.26 1.45 1.38 1.40 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.17 1.18 1.	3420', Aberdee nsl mg fri bri ye Azimuth 174.90 175.60 174.00 167.30 168.60 165.50 155.00 152.50 154.50 159.80 169.80	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
50-75 Depth 538 566 602 633 664 695 727 757 817 844 876 907 936 9971 1034 1066 1097 1128 1159 1191 11252 1283 1314 1346	Deviation 1.03 1.22 1.20 1.25 1.34 1.26 1.32 1.34 1.36 1.39 1.48 1.43 0.84 0.71 0.86 0.50 0.91 1.00 1.04 1.16 1.19 1.01 0.76 0.27 0.30 0.35 0.44	Azimuth 184.79 189.53 186.87 186.87 186.89 180.49 180.29 175.88 164.40 162.92 175.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 128.70 132.57 137.30 141.51 165.70 235.75 203.90 173.03 172.10	PROM (ft) (ft) (ft) (ft) (ft) (ft) (ft) (ft)	70 (8) 4306 4528 4570 4528 4570 1407 1407 1407 1433 1468 1759 1592 1593 1595 1826 1657 1782 1813 1544 1875 1906 1935 1997 2028 2060 2091 2120 2153	Deviation (%) 10-14 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	Azimuth	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.23 1.04 0.43 1.06 0.59 0.83 1.08 1.13 1.09 0.43 1.106 0.59 0.43 1.09 0.50 0.59 0.59 0.59 0.39 1.12 1.05 0.26 1.03 0.36 0.13	CHYS 65 75 70 Depth 2244 2275 2306 2337 2367 2399 2429 2460 2492 2523 2553 2554 2614 2644 2672 2703 2734 2764 2826 2856 2897 2919 2951 2981 3013 3042	RVEYS 1006 150 1000 RVEYS 227 224 2.06 2.05 1.95 1.48 1.22 0.96 0.96 0.96 1.58 1.122 0.96 0.96 1.123 1.10 1.30 1.60 1.58 1.82 1.77 1.30 1.20 0.90 0.90 0.90 0.90 0.90	Astmuth. 147.80 150.90 150.90 150.90 150.90 150.90 150.90 150.90 150.90 150.90 170.10 171.70 171.90 171.90 171.90 171.90 177.90 183.70 183.70 183.70 183.10 177.10 178.90 184.90 184.90 196.10 191.10 205.80 205.80 205.90	Sample per Sam	Depth 3103 3133 3165 3226 3257 3286 3320 3350 3413 3442 3503 3596 3748 3810 3998 4087 4387	Deviation 1.08 1.02 1.15 1.26 1.45 1.38 1.40 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.17 1.18 1.	3420', Aberdee nsl mg fri bri ye Azimuth 174.90 175.60 174.00 167.30 168.60 165.50 155.00 152.50 154.50 159.80 169.80	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
50-75 Depth 538 566 602 633 664 695 727 757 817 844 876 907 936 9971 1034 1066 1097 1128 1159 1191 11252 1283 1314 1346	Deviation 1.03 1.22 1.20 1.25 1.34 1.26 1.32 1.34 1.36 1.39 1.48 1.43 0.84 0.71 0.86 0.50 0.91 1.00 1.04 1.16 1.19 1.01 0.76 0.27 0.30 0.35 0.44	Azimuth 184.79 189.53 186.87 186.87 186.89 180.49 180.29 175.88 164.40 162.92 175.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 128.70 132.57 137.30 141.51 165.70 235.75 203.90 173.03 172.10	PROM (ft) (ft) (ft) (ft) (ft) (ft) (ft) (ft)	70 (8) 4306 4528 4570 4528 4570 1407 1407 1407 1433 1468 1759 1592 1593 1595 1826 1657 1782 1813 1544 1875 1906 1935 1997 2028 2060 2091 2120 2153	Deviation (%) 10-14 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	Azimuth	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.23 1.04 0.43 1.06 0.59 0.83 1.08 1.13 1.09 0.43 1.106 0.59 0.43 1.09 0.50 0.59 0.59 0.59 0.39 1.12 1.05 0.26 1.03 0.36 0.13	CHYS 65 75 70 Depth 2244 2275 2306 2337 2367 2399 2429 2460 2492 2523 2553 2554 2614 2644 2672 2703 2734 2764 2826 2856 2897 2919 2951 2981 3013 3042	RVEYS 1006 150 1000 RVEYS 227 224 2.06 2.05 1.95 1.48 1.22 0.96 0.96 0.96 1.58 1.122 0.96 0.96 1.123 1.10 1.30 1.60 1.58 1.82 1.77 1.30 1.20 0.90 0.90 0.90 0.90 0.90	Astmuth. 147.80 150.90 150.90 150.90 150.90 150.90 150.90 150.90 150.90 150.90 170.10 171.70 171.90 171.90 171.90 171.90 177.90 183.70 183.70 183.70 183.10 177.10 178.90 184.90 184.90 196.10 191.10 205.80 205.80 205.90	Sample per Sam	Depth 3103 3133 3165 3226 3257 3286 3320 3350 3413 3442 3503 3596 3748 3810 3998 4087 4387	Deviation 1.08 1.02 1.15 1.26 1.45 1.38 1.40 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.17 1.18 1.	3420', Aberdee nsl mg fri bri ye Azimuth 174.90 175.60 174.00 167.30 168.60 165.50 155.00 152.50 154.50 159.80 169.80	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
50-75 Depth 538 660 633 664 695 727 757 787 817 844 907 936 1086 1159 11128 1159 1191 1221 1221 1221 1234 1346	Deviation 1.03 1.22 1.20 1.25 1.34 1.26 1.32 1.34 1.36 1.39 1.48 1.43 0.84 0.71 0.86 0.50 0.91 1.00 1.04 1.16 1.19 1.01 0.76 0.27 0.30 0.35 0.44	Azimuth 184.79 189.53 186.87 186.87 186.89 180.49 180.29 175.88 164.40 162.92 175.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 128.70 132.57 137.30 141.51 165.70 235.75 203.90 173.03 172.10	PROM (ft) (ft) (ft) (ft) (ft) (ft) (ft) (ft)	70 (8) 4306 4528 4570 4528 4570 1407 1407 1407 1433 1468 1759 1592 1593 1595 1826 1657 1782 1813 1544 1875 1906 1935 1997 2028 2060 2091 2120 2153	Deviation (%) 10-14 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 157.60 158.00 156.00 1	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.43 1.29 0.65 1.23 1.04 0.43 1.29 0.65 1.23 1.04 0.59 0.83 1.05 0.50 0.50 0.50 0.50 0.39 1.12 1.05 0.26 1.03 0.36 0.13 1.52	UNTS 65 75 70 10N SU Depth 2244 2275 2306 2337 2399 2429 2492 2523 2584 2614 2672 2703 2734 2764 2826 2837 2919 2951 3013 3042 3072	RVEYS 1006 150 1000 150 1000 150 1000 150 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000	Asimuth: 147.80 150.90 150.156.50 158.70 157.60 163.20 170.10 171.70 171.90 171.70 175.40 163.70 163.10 177.10 178.90 184.00 195.70 196.10 197.10 198.10 199.10 199.10 199.10 199.10	Sample per Sam	Depth 3103 3133 3165 3226 3257 3286 3320 3350 3413 3442 3503 3596 3748 3810 3998 4087 4387	Deviation 1.08 1.02 1.15 1.26 1.45 1.38 1.40 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.17 1.18 1.	3420', Aberdee nsl mg fri bri ye Azimuth 174.90 175.60 174.00 167.30 168.60 165.50 155.00 152.50 154.50 159.80 169.80	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.82 0.31 0.54 0.79 0.33 0.23
50-75 Depth 538 566 602 633 664 695 727 757 817 844 876 907 936 9971 1034 1066 1097 11128 1159 1191 11221 1252 1283 1314 1314	Deviation 1.03 1.22 1.20 1.25 1.34 1.26 1.32 1.34 1.36 1.39 1.48 1.43 0.84 0.71 0.86 0.50 0.91 1.00 1.04 1.16 1.19 1.01 0.76 0.27 0.30 0.35 0.44	Azimuth 184.79 189.53 186.87 186.87 186.89 180.49 180.29 175.88 164.40 162.92 175.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 128.70 132.57 137.30 141.51 165.70 235.75 203.90 173.03 172.10	PROM (th) (4208 4502 4560 4502 4560 51	70 (8) 4306 4528 4570 4528 4570 1407 1407 1407 1433 1468 1759 1592 1593 1595 1826 1657 1782 1813 1544 1875 1906 1935 1997 2028 2060 2091 2120 2153	Deviation (%) 10-14 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	Azimuth 190.80 190.50 201.30 218.50 206.70 194.00 157.60 158.00 156.00 1	DEVIAT DL Angle 1.35 0.39 0.47 0.83 1.08 1.13 0.29 0.43 1.29 0.43 1.29 0.65 1.23 1.04 0.43 1.29 0.65 1.23 1.04 0.59 0.83 1.05 0.50 0.50 0.50 0.50 0.39 1.12 1.05 0.26 1.03 0.36 0.13 1.52	UNTS 65 75 70 10N SU Depth 2244 2275 2306 2337 2399 2429 2492 2523 2584 2614 2672 2703 2734 2764 2826 2837 2919 2951 3013 3042 3072	RVEYS 1006 150 1000 RVEYS 227 224 2.06 2.05 1.95 1.48 1.22 0.96 0.96 0.96 1.58 1.122 0.96 0.96 1.123 1.10 1.30 1.60 1.58 1.82 1.77 1.30 1.20 0.90 0.90 0.90 0.90 0.90	Azimuth. 147.80 150.90 150.90 150.90 150.90 150.90 150.90 150.90 150.90 170.70 170.70 170.70 171.20 170.70 183.70 183.70 183.10 177.10 177.10 177.10 177.10 177.10 177.10 183.40 183.10 177.10 178.40 183.10 177.10 170.70 183.10 177.10 170.70 183.10 177.10 170.70 183.10 177.10 170.70 183.10 177.10 170.70 183.10 177.10 170.70 183.10 177.10 170.70 183.10 170.70 183.10 170.70 183.10 191.10 191.10 191.10 191.10	Sample per Sam	Depth 3103 3133 3165 3196 3226 3257 3288 3320 3350 3361 3413 3443 3472 3503 3506 3686 3748 3410 3902 3996 4087 4335 4397 4492	Deviation	3420', Aberdee nsl mg fri bri ye Azimuth 174.90 175.60 174.00 167.30 168.60 165.50 155.00 152.50 154.50 159.80 169.80	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.54 0.79 0.33 0.23 1.52
50-75 Depth 538 566 602 633 664 695 727 757 787 817 844 876 907 936 971 1094 1096 1097 1128 1159 1191 1221 1252 1283 1314	Deviation 1.03 1.22 1.20 1.25 1.34 1.26 1.32 1.34 1.36 1.39 1.48 1.43 0.84 0.71 0.86 0.50 0.91 1.00 1.04 1.16 1.19 1.01 0.76 0.27 0.30 0.35 0.44	Azimuth 184.79 189.53 186.87 186.87 186.89 180.49 180.29 175.88 164.40 162.92 175.82 143.19 137.08 130.59 112.85 107.94 109.50 120.10 128.70 132.57 137.30 141.51 165.70 235.75 203.90 173.03 172.10	PROM (th) (4208 (th) 4208 (4502 (4560 (th) 4502 (4560 (th) 4560 (t	70 (8) 4306 4528 4570 1407 1407 1407 1408 1499 1532 1595 1626 1957 1626 1957 1906 1937 2028 2060 2091 2120 2152 2183 2213	Deviation (%) 10-14 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	Azimuth 190.80 190.50 201.30 218.50 201.30 218.50 206.70 194.00 187.20 196.70 202.10 202.10 179.00 164.00 149.00 155.60 164.00 149.00 155.60 164.00 149.00 155.60 164.00	DEVIAT DL Angle 1.35 0.39 0.47 0.63 1.08 1.13 0.29 0.43 1.23 1.04 0.43 1.29 0.65 1.23 1.04 0.43 1.06 0.59 0.83 1.08 1.13 1.06 0.59 0.81 1.06 0.59 0.83 0.54 1.59 0.50 0.39 1.12 1.05 0.83 0.54 1.59 0.50 0.39 1.15 0.50 0.39 1.15 0.50 0.39 1.15 0.50 0.39 1.15 0.50 0.39 1.15 0.50 0.39 1.15 0.50 0.39 0.50 0.30 0.50 0.50 0.50 0.50 0.50 0.50	CNTS 65 75 70 Pepth 2244 2275 2306 2337 2399 2429 2420 2492 2523 2584 2614 2644 2672 2703 2734 2826 2836 2837 2919 2951 2981 3013 3042 3072	DUPUNG UNITS 1006 150 1000 150 1000 150 1000 2.27 2.24 2.06 2.05 1.95 1.48 1.22 0.96 0.96 0.91 1.23 1.10 1.30 1.60 1.82 1.77 1.30 1.00 0.90 0.90 0.90 0.90 0.90 0.90 0.70 1.00 1.00	Azimuth. 147.80 150.90 150.90 150.90 150.90 150.90 150.90 150.90 150.90 170.70 170.70 170.70 171.20 170.70 183.70 183.70 183.10 177.10 177.10 177.10 177.10 177.10 177.10 183.40 183.10 177.10 178.40 183.10 177.10 170.70 183.10 177.10 170.70 183.10 177.10 170.70 183.10 177.10 170.70 183.10 177.10 170.70 183.10 177.10 170.70 183.10 177.10 170.70 183.10 170.70 183.10 170.70 183.10 191.10 191.10 191.10 191.10	DL Angle 0.68 1.11 0.64 0.13 0.73 1.62 0.87 0.84 0.01 0.17 0.62 0.80 1.20 0.18 0.48 1.02 0.25 0.79 0.94 1.01 0.72 0.78 0.56 1.18 1.03 0.86	Depth 3103 3133 3165 3196 3226 3257 3288 3320 3350 3361 3413 3443 3472 3503 3506 3686 3748 3410 3902 3996 4087 4335 4397 4492	Deviation 1.08 1.02 1.15 1.26 1.45 1.38 1.40 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.17 1.18 1.	3420', Aberdee nsl mg fri bri ye Azimuth 174,90 175,60 174,00 167,30 169,60 165,50 155,00 152,50 152,50 152,50 154,50 159,80 160,20 178,80	DL Angle 0.96 0.14 0.42 0.58 0.66 0.40 0.54 0.79 0.33 0.23 1.52

7P50

National

6.25

7.75

95.00%

118 0.0736 8.25

347

1,210 no MM

3.09

200

429

/ELL N/ TS. OF		Jensen 1-18 34 from yard, 3 from last loc	TBG. GRADE:	J55 17 lb/ft ST&C	TALLIED BY: CONDITION:					
13. UF	KB:	34 from yard, 3 from last loc	RANGE:	3	DATE:	new 9/9/2004				
1:	45.44	45.44	TOTOL.		: :	3/3/2004				
	46.41	91.85								
	4 4 4 4 4 4 4 4	137.71								
3	45.86									
4	45.55	183.26								
	45.10	228.36								
6	46.00	274.36								
. (45.90	320.26								
	43.01	363.27								
	45.71	408.98								
10	46.15	455.13								
11	45.91	501.04							4	
	46.02	547.06								
	46.08	593.14								
14	46.83	639.97								
15	42.88	682.85								
16	45.18	728.03								
17	46.10	774.13					:			
18	45.88	820.01								
19	45.27	865.28					:			
20	45.99	911.27					:			
21	45.94	957.21								
22	46.14	1003.35								
23	46.12	1049.47								
24	44.46	1093.93								
25	44.46	1138.39								
26	40.61	1179.00								
27	45.88	1224.88								
28	43.37	1268.25								
29	45.92	1314.17								
30	46,11	1360.28								i
31	45.58	1405.86 Re	turn 5 joints to yard 230.87							
32	45.58	1451.44	45.78							
33			46.12							
34			46.40							
35			46.12							
36			46.45							
37										
8										:
39							<u> </u>			
10							1			
1.	451.44	0.00	0.00	0.00	0.0	iol	0.00	0.	00	0.00
Ü		i	l i j	tiiiiii	h		::::::::::::::::::::::::::::::::::::	(āāi t h aaaa	***************************************

		EV	GREEN OPERATING Casing Running & Ceme						
	Well Name:	Jensen 1-18	County:	Carbon_			State: U	tah	
		7 7/8 " Depth 45	Date Cemented:	9/12/2	2004	Mud Wei	ght: 8.4	#/و	gallon
	Ground Level:								
		Casing Detail (Show o	casing as run in holebotto	om to top.	Threads	Off Meaur	ement.)		
No. of Joints:	· · · · · · · · · · · · · · · · · · ·	Ma	nufacturerItem	Wt./#	Grade		ype eads	Foo	otage
Jonnes.	5 1/2		Seal Float Shoe				T&C		1.38
1	5 1/2	porduction li		32	J55		T&C		45.44
	5 1/2		Seal Float Collar				T&C		1.25 1.06
	5 1/2	Gemoco Lar			J55		Γ&C	_ 	1406
31	5 1/2	production li Hanger Asse			333		T&C		5.55
103	4 1/2	Drill Pipe	embly	16.6	E		/2 XH		3179
103	4 1/2	Винт пре							
							TOTAL:		4639.68
							UPSET:		2
			-61: 0470				SET AT:		4637.68
	Set Casing @: Total Jts. Run:	4638 ' KB Top	of Liner 3176'						
	Total Jts. Run:		entralizers:						10
	quipment:	4001.10 11.0							
<u>all drillir</u>	ng fluid and 15 bb	l cement to surface							
Cei	menting Compa	ny: HES		С	irculated	:	mins. @	70 ps	si.
	Started Mixing:	3:00			Pressure	on Plug:	596 over 7	36 ps	si
	Plug Down @	3:50				Bled to:		0 ps	si
			Cemented wi						
Halad-3	22 + .2% versase	<u>sx 505:50 Poz, yield 1.et + .25 #/sx flocele, dis</u> returned 1.5 bbl water	22, 70 bbl slurry, mixed at 1 placed with 78 bbl fresh wat to tank, float held OK	4.35 <u>Ib/gal</u> er, bumped	with 5.34 d plud with	<u>gai wtr/sx -</u> n <u>596</u> psi oʻ	<u>+ 5% sait + 2</u> ver <u>735 psi lif</u>	<u>micror</u>	<u>50nd + .6%</u> <u>ssure</u> (1331
. 1	Гор of Cement: _	3129' ' mad	de by pipe strap		CBL:		Calcul	ated:	
	Signature:	John C. Lamb				Date:			9/12/2004

0 0-	AME: _		1-18 TE	G. GRADE:	J55 17 lb/ft		ALLIED BY:			_			
S. OF		34 from yard, 3 fr		IREAD:	ST&C	_ C	ONDITION:	new					
	KB:		RA	NGE:	3		DATE:	9/9/2004	4 5				,
1	45.44	45.44											
2	46.41	91.85											1
3	45.86	137.71											
1	45.55	183.26						:					
5	45.10	228.36				***************************************							
- 3 :	46.00	274.36				4			ii		:		
	45.90	320.26							l			,	
3	43.01	363.27				· [· · · · · · · · · · · · · · · · · ·			ļ				. -
									ļ			·····	
9	45.71	408.98							ļ				
) , , , ,	46.15	455.13							ļ			:	
1	45.91	501.04											
2	46.02	547.06						:					
3	46.08	593.14											
4	46.83	639.97											
5	42.88	682.85											
6	45.18	728.03					:						
7	46.10	774,13	: :										
8	45.88	820.01							?				
9	45.27	865.28											
0	45.99	911.27							<u> </u>			<u> </u>	
1	45.94	957.21										<u> </u>	
												<u> </u>	
2	46.14												1
3	46.12	1049.47							ļ				
1	44.46	1093.93							ļ				
5	44.46	1138.39							ļ				
6	40.61	1179.00							ļ				
7	45.88	1224.88		i i									-
3	43.37	1268.25		i								1 2	
)	45.92	1314.17											
0	46.11	1360.28		·····			:						
1	45.58	1405.86	Return 5 joints to ya	d 230.87		1		:					
2	45.58		45.78						<u> </u>			: :	
- 3			46.12				:		ļ				
4			46.40						· †			-	
† 5									· • · · · · • • · · · · · · · · · · · ·				
	-4		46.12								l	<u> </u>	
3			46.45										
7												:	
3				<u>.</u>									1
9													
0													
1	451.44		0.00	0.00	0.0	0	0.0	00	0	.00	0,00	0.0	0
C2222777	***************************************	i-	processes the state of the stat	***************************************	Constitution	*****	1500000000000000	70001	·! !!!!!!!!!!	******	(***************	200 Ibanana	****

			E		EN OPERATING g Running & Ceme						
	Well Name:	Jensen 1	-18		County:	Carbon			State:	Utah	
	Hole Size:	7 7/8 "	Depth		Date Cemented:	9/12	/2004	Mud We	eight: 8	3.4	#/gallon
	Ground Level:		DF		KB						
		Casing De	etail (Sho	ow casing a	s run in holebott	om to top.	Threads	Off Meau	rement.)		
No. of Joints:	Size O.D.			Manufactu	rerltem	Wt./#	Grade		Type reads		Footage
oomto.	5 1/2		Gemoco	Sur Seal Flo					T&C		1.38
1	5 1/2		porduction			32	J55		T&C		45.44
	5 1/2			Sur Seal Flo					T&C		1.25
	5 1/2			Landing Co	lar		155		T&C		1.06 1406
31	5 1/2	·	production	Assembly			J55		T&C T&C		5.55
103	4 1/2		Drill Pipe			16.6	E		1/2 XH		3179
103	4 1/2		Dilli i ipe			10.0	<u> </u>	<u> </u>	1/2 ///		0170
											
									TOTAL:		4639.68
									UPSET:		2
	Set Casing @:	4638	' KB	Top of Line	3176'				SET AT:		4637.68
	Γotal Jts. Run:	32									
	T COLLAR @:	4591.18	' KB	Centralize	rs:		· · · · · · · · · · · · · · · · · · ·				10
Cem	enting Compar	ıv: HE	S			С	irculated	:	mins. @	70	psi.
	tarted Mixing:	3:00					Pressure		596 over		psi.
	Plug Down @	3:50						Bled to:			psi.
					Cemented wit	·h·	· · · · · · · · · · · · · · · · · · ·	THE STATE OF THE STATE OF THE STATE OF			
<u> Halad-32</u>		t + .25 #/s	<u>x flocele,</u>	displaced w	l slurry, mixed at 14 ith 78 bbl fresh wate	1.35 <u>lb/gal</u>					
То	p of Cement:	3129'		nade by pip	e strap		CBL:		Calcu	lated:	Ī
	Signature:	John C.	Lamb					Date:			9/12/2004
		i-1	NOTE:	ATTACH C	OPY OF CASING 1	ALLY TO	THIS RE	PORT			

	DEPARTMENT OF NATURAL RESOUR DIVISION OF OIL, GAS AND MIN		5. LEASE DESIGNATION AND SERIAL NUMBER:
SUNDRY	NOTICES AND REPORTS	S ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: N/A
Do not use this form for proposals to drill no	ew wells, significantly deepen existing wells below curr terals. Use APPLICATION FOR PERMIT TO DRILL fo	rent bottom-hole depth, reenter plugged wells, or to	7. UNIT of CA AGREEMENT NAME: N/A
1. TYPE OF WELL OIL WELL			8. WELL NAME and NUMBER: HUBER-JENSEN 1-18
2. NAME OF OPERATOR: PIONEER NATURAL RES	SOURCES		9. API NUMBER: \$\fomale 300730718
3. ADDRESS OF OPERATOR:	DENVER STATE CO ZIP	80202 PHONE NUMBER: (303) 298-8100	10. FIELD AND POOL, OR WILDCAT: CASTLEGATE
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1380 F		(0.00)	COUNTY: CARBON
QTR/QTR, SECTION, TOWNSHIP, RANG	GE, MERIDIAN: NESE 18 12S 1	0E	STATE: UTAH
11. CHECK APPE	ROPRIATE BOXES TO INDICAT	E NATURE OF NOTICE, REPO	ORT, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
NOTICE OF INTENT	ACIDIZE	DEEPEN FRACTURE TREAT	REPERFORATE CURRENT FORMATION SIDETRACK TO REPAIR WELL
(Submit in Duplicate) Approximate date work will start:	ALTER CASING CASING REPAIR	NEW CONSTRUCTION	TEMPORARILY ABANDON
, , , , , , , , , , , , , , , , , , , ,	CHANGE TO PREVIOUS PLANS	OPERATOR CHANGE	TUBING REPAIR
	CHANGE TUBING	PLUG AND ABANDON	VENT OR FLARE
SUBSEQUENT REPORT	CHANGE WELL NAME	PLUG BACK	WATER DISPOSAL
(Submit Original Form Only)	CHANGE WELL STATUS	PRODUCTION (START/RESUME)	WATER SHUT-OFF
Date of work completion:	COMMINGLE PRODUCING FORMATIONS	RECLAMATION OF WELL SITE	OTHER:
	CONVERT WELL TYPE	RECOMPLETE - DIFFERENT FORMATION	· ·
OPERATIONS ARE SUSF	DMPLETED OPERATIONS. Clearly show all p PENDED DUE TO EVALUATION PERTATION	nes, etc.	
			RECEIVED DEC 1 3 2004
			DIV. OF OIL. GAS & MININ
NAME (PLEASE PRINT) LARRY G	. SESSIONS	TITLE AREA FOREM	AN
SIGNATURE .	Session	DATE 12/7/2004	<u> </u>
(This space for State use only)	, , , , , , , , , , , , , , , , , , ,		26-05-

(5/2000)

STATE OF UTAH

FORM	
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	DIVISION OF OIL, GAS AND M	IRCES INING	5. LEASE DESIGNATION AND SERIAL NUMBER:
			FEE
SUNDRY	NOTICES AND REPORT	S ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: N/A
Do not use this form for proposals to drill n drill horizontal la	new wells, significantly deepen existing wells below cu sterals. Use APPLICATION FOR PERMIT TO DRILL	urrent bottom-hole depth, reenter plugged we form for such proposals.	
TYPE OF WELL OIL WELL	GAS WELL OTHER		8. WELL NAME and NUMBER: HUBER-JENSEN 1-18
2. NAME OF OPERATOR: PIONEER NATURAL RES	SOURCES		9. API NUMBER: 300730718
3. ADDRESS OF OPERATOR: 1401 17TH ST. #1200	DENIVER CO	80202 PHONE NUMBER: (303) 298-8	10. FIELD AND POOL, OR WILDCAT: 100 CASTLEGATE
4. LOCATION OF WELL	Y DENVER STATE CO	00202 (003) 200-0	0,101220.112
FOOTAGES AT SURFACE: 1380	FSL 855' FEL		COUNTY: CARBON
QTR/QTR, SECTION, TOWNSHIP, RAN	IGE, MERIDIAN: NESE 18 12S	10E	STATE: UTAH
11. CHECK APPI	ROPRIATE BOXES TO INDICA	TE NATURE OF NOTICE,	REPORT, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	V
NOTICE OF INTENT	ACIDIZE	DEEPEN	REPERFORATE CURRENT FORMATION
(Submit in Duplicate)	ALTER CASING	FRACTURE TREAT	SIDETRACK TO REPAIR WELL
Approximate date work will start:	CASING REPAIR	NEW CONSTRUCTION	TEMPORARILY ABANDON
1/17/2005	CHANGE TO PREVIOUS PLANS	OPERATOR CHANGE	TUBING REPAIR
A109-6-10-7	CHANGE TUBING	PLUG AND ABANDON	VENT OR FLARE
SUBSEQUENT REPORT	CHANGE WELL NAME	PLUG BACK	WATER DISPOSAL
(Submit Original Form Only)	CHANGE WELL STATUS	PRODUCTION (START/RESUME	WATER SHUT-OFF
Date of work completion:	COMMINGLE PRODUCING FORMATIONS	RECLAMATION OF WELL SITE	OTHER:
	CONVERT WELL TYPE	RECOMPLETE - DIFFERENT FO	
CLEANING OUT WELL T	OMPLETED OPERATIONS. Clearly show all O RUN CBL. PERFORATE AN TH PRESSURE BOMBS IN HOL	D RUN PRESSURE GAUC	GES FOR PRESSURE BUILD UP.
CLEANING OUT WELL T	O RUN CBL. PERFORATE AN	D RUN PRESSURE GAUC	GES FOR PRESSURE BUILD UP.
CLEANING OUT WELL T	O RUN CBL. PERFORATE AN	D RUN PRESSURE GAUC	GES FOR PRESSURE BUILD UP.
CLEANING OUT WELL T	O RUN CBL. PERFORATE AN	D RUN PRESSURE GAUG LE FOR A MINIMUN OF TV	GES FOR PRESSURE BUILD UP.
CLEANING OUT WELL T WILL SHUT WELL IN WI	O RUN CBL. PERFORATE AN TH PRESSURE BOMBS IN HOL	D RUN PRESSURE GAUG LE FOR A MINIMUN OF TV	PRESSURE BUILD UP. WO WEEKS. 1-36-05 CHO AREA FOREMAN
CLEANING OUT WELL T WILL SHUT WELL IN WIT	O RUN CBL. PERFORATE AN TH PRESSURE BOMBS IN HOL	D RUN PRESSURE GAUG LE FOR A MINIMUN OF TV	PRESSURE BUILD UP. WO WEEKS. 1-36-05 CHO AREA FOREMAN

STATE OF UTAH			FORM 9
DEPARTMENT OF NATURAL RESOU DIVISION OF OIL, GAS AND MI			5. LEASE DESIGNATION AND SERIAL NUMBER: Fee
SUNDRY NOTICES AND REPORT	S ON WEL	LS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
Do not use this form for proposals to drill new wells, significantly deepen existing wells below cu drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL	urrent bottom-hole dep	th, reenter plugged wells, or to	7. UNIT or CA AGREEMENT NAME:
1. TYPE OF WELL OIL WELL GAS WELL OTHER	Tominion dual propositi		8. WELL NAME and NUMBER: Huber -Jensen 1-18
2. NAME OF OPERATOR:			9. APLNUMBER: 7 300730718
Pioneer Natural Resources USA, Inc 3. ADDRESS OF OPERATOR:		PHONE NUMBER:	10. FIELD AND POOL, OR WLDCAT:
1401 17th Street Denver, STATE CO	80202	(303) 298-8100	Castlegate
4. LOCATION OF WELL			
FOOTAGES AT SURFACE: 1380 FSL 855 FEL			COUNTY: Carbon
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NESE 18 12S	10E S		STATE: UTAH
11. CHECK APPROPRIATE BOXES TO INDICA	TE NATURE	OF NOTICE, REPO	RT, OR OTHER DATA
TYPE OF SUBMISSION	Т	YPE OF ACTION	
NOTICE OF INTENT	DEEPEN		REPERFORATE CURRENT FORMATION
(Submit in Duplicate) ALTER CASING	FRACTURE		SIDETRACK TO REPAIR WELL
Approximate date work will start: CASING REPAIR		STRUCTION	TEMPORARILY ABANDON
CHANGE TO PREVIOUS PLANS	OPERATOR		TUBING REPAIR
CHANGE TUBING	PLUG AND		VENT OR FLARE
SUBSEQUENT REPORT (Submit Original Form Only)	PLUG BAC		WATER CHILT OF
Date of work completion:		ON (START/RESUME)	WATER SHUT-OFF
COMMINGLE PRODUCING FORMATIONS		TION OF WELL SITE ETE - DIFFERENT FORMATION	✓ OTHER: Status
CONVERT WELL TYPE			
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all	l pertinent details ir	icluding dates, depths, volun	nes, etc.
Well shut in.			
NAME (PLEASE PRINT) Doris Maly	TIT	Sr Engineering	Tech
SIGNATURE WAS MARLY		4/25/2005	

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RECEIVED

APR 2 8 2005

STATE OF UTAH

DEPARTMENT OF NATURAL RESOURCES 5. LEASE DESIGNATION AND SERAL NUMBER: DIVISION OF OIL, GAS AND MINING Fee 6. IF INDIAN, ALLOTTEE OR TRIBE NAME: SUNDRY NOTICES AND REPORTS ON WELLS 7. UNIT or CA AGREEMENT NAME: Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals. 8. WELL NAME and NUMBER: 1. TYPE OF WELL GAS WELL 🗸 OIL WELL OTHER Huber-Jensen 1-18 9. API NUMBER: 2. NAME OF OPERATOR: 3000730718 Pioneer Natural Rescources PHONE NUMBER: 10. FIELD AND POOL, OR WILDCAT: 3. ADDRESS OF OPERATOR: Castlegate CO 310 80202 (303) 298-8100 1401 17th St. Ste.1200 CITY Denver STATE 4. LOCATION OF WELL COUNTY: Carbon FOOTAGES AT SURFACE: 1380 FSL, 855 FEL **12S** 10E S STATE: QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NESE 18 **UTAH** CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA 11. TYPE OF ACTION TYPE OF SUBMISSION ACIDIZE DEEPEN REPERFORATE CURRENT FORMATION NOTICE OF INTENT SIDETRACK TO REPAIR WELL (Submit in Duplicate) ALTER CASING FRACTURE TREAT Approximate date work will start: CASING REPAIR **NEW CONSTRUCTION** TEMPORARILY ABANDON CHANGE TO PREVIOUS PLANS OPERATOR CHANGE TUBING REPAIR PLUG AND ABANDON VENT OR FLARE **CHANGE TUBING** \square SUBSEQUENT REPORT WATER DISPOSAL CHANGE WELL NAME PLUG BACK (Submit Original Form Only) WATER SHUT-OFF CHANGE WELL STATUS PRODUCTION (START/RESUME) Date of work completion: COMMINGLE PRODUCING FORMATIONS RECLAMATION OF WELL SITE OTHER: Mo Status CONVERT WELL TYPE RECOMPLETE - DIFFERENT FORMATION

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Well shut in. Currently reviewing pressure data collected.

NAME (PLEASE PRINT) Mar	k Gully		TITLE	Staff Operations Er	ngineer
SIGNATURE M	Josh 7 5	July	DATE	7/14/2005	
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JUL 1 8 2005

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

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ſ	5. LEASE DESIGNATION AND SERIAL NUMB	BER:	

	Dividion of one, cherino illimit		Fee
SUNDRY	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:		
Do not use this form for proposals to drill r	7. UNIT or CA AGREEMENT NAME:		
1. TYPE OF WELL OIL WELL	Iterals. Use APPLICATION FOR PERMIT TO DRILL form for GAS WELL OTHER	Today proposato.	8. WELL NAME and NUMBER: Huber-Jensen 1-18
2. NAME OF OPERATOR:			9. API NUMBER:
Pioneer Natural Resource	S		4300730718
3. ADDRESS OF OPERATOR: 1401 17th St., Suite 1200	Denver STATE CO ZIP 802	PHONE NUMBER: (303) 298-8100	10. FIELD AND POOL, OR WILDCAT: Castlegate
4. LOCATION OF WELL	STATE OF ZIPOOZ	(000) 200 0100	Cacacagato
FOOTAGES AT SURFACE: 1380'	FSL & 855' FEL		COUNTY: Carbon
QTR/QTR, SECTION, TOWNSHIP, RAN	STATE: UTAH		
11. CHECK APP	ROPRIATE BOXES TO INDICATE N	ATURE OF NOTICE, REPO	RT, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
NOTICE OF INTENT	ACIDIZE	DEEPEN	REPERFORATE CURRENT FORMATION
NOTICE OF INTENT (Submit in Duplicate)	ALTER CASING	FRACTURE TREAT	SIDETRACK TO REPAIR WELL
Approximate date work will start:	CASING REPAIR	NEW CONSTRUCTION	TEMPORARILY ABANDON
	CHANGE TO PREVIOUS PLANS	OPERATOR CHANGE	TUBING REPAIR
	CHANGE TUBING	PLUG AND ABANDON	VENT OR FLARE
SUBSEQUENT REPORT	CHANGE WELL NAME	PLUG BACK	WATER DISPOSAL
(Submit Original Form Only)	CHANGE WELL STATUS	PRODUCTION (START/RESUME)	WATER SHUT-OFF
Date of work completion:	COMMINGLE PRODUCING FORMATIONS	RECLAMATION OF WELL SITE	✓ other: Suspended well
	CONVERT WELL TYPE	RECOMPLETE - DIFFERENT FORMATION	status
12. DESCRIBE PROPOSED OR C	DMPLETED OPERATIONS. Clearly show all pertin		nes, etc.
	y with this well since last report.		
There has been no activit	y with this well since last report.		
NAME (PLEASE PRINT) Kallasano	lra M. Boulay	TITLE Engineering Ana	alyst
MAINE (FLEASE PRINT)			
SIGNATURE		DATE 2/28/2006	

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STATE OF UTAH

DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL. GAS AND MINING 5. LEASE DESIGNATION AND SERIAL NUMBER: Fee 6. IF INDIAN, ALLOTTEE OR TRIBE NAME: SUNDRY NOTICES AND REPORTS ON WELLS N/A 7. UNIT or CA AGREEMENT NAME: Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals. N/A 8. WELL NAME and NUMBER: 1. TYPE OF WELL OTHER Reserve Pit GAS WELL OIL WELL Huber-Jensen 1-18 2. NAME OF OPERATOR: 9. API NUMBER: **4**300730718 Pioneer Natural Resources 3. ADDRESS OF OPERATOR: PHONE NUMBER 10. FIELD AND POOL, OR WILDCAT: 1401 17th Street Suite 1200 CO 80202 (303) 298-8100 Castlegate Denver STATE 4. LOCATION OF WELL FOOTAGES AT SURFACE: 1380' FSL 855' FEL COUNTY: Carbon QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NESE 10E STATE: **UTAH** CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA 11. TYPE OF SUBMISSION TYPE OF ACTION DEEPEN ACIDIZE REPERFORATE CURRENT FORMATION \square NOTICE OF INTENT (Submit in Duplicate) ALTER CASING FRACTURE TREAT SIDETRACK TO REPAIR WELL Approximate date work will start CASING REPAIR NEW CONSTRUCTION TEMPORARILY ABANDON CHANGE TO PREVIOUS PLANS **OPERATOR CHANGE** TUBING REPAIR 11/10/2005 CHANGE TUBING PLUG AND ABANDON VENT OR FLARE SUBSEQUENT REPORT CHANGE WELL NAME PLUG BACK WATER DISPOSAL (Submit Original Form Only) CHANGE WELL STATUS PRODUCTION (START/RESUME) WATER SHUT-OFF Date of work completion COMMINGLE PRODUCING FORMATIONS RECLAMATION OF WELL SITE OTHER: extension for reserve pit to remain open CONVERT WELL TYPE **RECOMPLETE - DIFFERENT FORMATION** 12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. This sundry is written to respond to the NOV received September 30, 2005 stating pit closure had exceeded one year. Multiple down hole pressure and permeability data has been gathered from this well over the past year and plans were to complete the well (fracture stimulate) in 2006. This stimulation will not occur in 2006 and therefore it is the company's intent to close this pit by the second week of November 2005. A monthly sundry on the suspended well status of this well on this location will continue to be filed. Please inform if the above intention is satisfactory. RECEIVED UC 19 2005 OGM PRICE FIELD OFFICE Mark T. Gully Staff Operations Engineer NAME (PLEASE PRINT)

10/18/2005

DATE

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STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OU. CAS AND MINUS

DIVISION OF OIL, GAS AND MINING	5. LEASE DESIGNATION AND SERIAL NUMBER:
SUNDRY NOTICES AND REPORTS ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	7. UNIT or CA AGREEMENT NAME:
1. TYPE OF WELL OIL WELL GAS WELL OTHER	8. WELL NAME and NUMBER: Huber-Jensen 1-18
2. NAME OF OPERATOR: Pioneer Natural Resources 3. ADDRESS OF OPERATOR: I PHONE NAME OF OPERATOR:	9. API NUMBER: 4300730718
1401 17th St., Suite 1200 CITY Denver STATE CO ZIP 80202 (303) 675-2719	10. FIELD AND POOL, OR WILDCAT: Castlegate
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1380' FSL & 855' FEL	соинту: Carbon
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NESE 18 12S 10E	STATE: UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPO	RT, OR OTHER DATA
TYPE OF SUBMISSION TYPE OF ACTION	
NOTICE OF INTENT	✓ REPERFORATE CURRENT FORMATION
(Submit in Duplicate) ALTER CASING FRACTURE TREAT	SIDETRACK TO REPAIR WELL
Approximate date work will start: CASING REPAIR NEW CONSTRUCTION	TEMPORARILY ABANDON
CHANGE TO PREVIOUS PLANS OPERATOR CHANGE	TUBING REPAIR
CHANGE TUBING PLUG AND ABANDON	VENT OR FLARE
SUBSEQUENT REPORT CHANGE WELL NAME PLUG BACK (Submit Original Form Only)	WATER DISPOSAL
Date of work completion: CHANGE WELL STATUS PRODUCTION (START/RESUME)	WATER SHUT-OFF
3/3/2005 COMMINGLE PRODUCING FORMATIONS RECLAMATION OF WELL SITE	✓ other: Gather pressure data
3/3/2009 CONVERT WELL TYPE RECOMPLETE - DIFFERENT FORMATION	from single coal seam
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volume 1-17-2005 - MIRUPU 1-19-2005 - Ran 7 5/8" flat bottom mill and tagged cement @ 3166'. CO hole to TOL @ 3176 tagged cement inside liner @ 3181'. DO cement inside liner to 4591' and circulate hole clear 1-20-2005 - Pressure tested casing to 2000 psi. Tested OK. RUWL truck. Ran GR/CBL from cement to surface. RDWL. 2-10-2005 - RUWL. RIH w/ 4" casing gun and perforated 4287'-4296' @ 2 SPF, 90 degree p 2-11-2005 - Spotted 20 gal NEFE 15% HCl above top perf. Broke down formation @ 2 BPM RIH w/ tandem pressure gauges and hung off 30' above top perf. Left gauges in hole. 2-22-2005 - POH w/ wireline and gauges. 3-4-2005 - MIRU Tefteller and gathered dip-in pressure data. Leave well shut-in. WO evaluated	6'. TIH w/ 4 3/4" rock bit and b. 4590' to surface. Log confirmed hasing. POH & RDWL. w/ maximum pressure of 1000 psi.
Kallasandra M Poulau	
NAME (PLEASE PRINT) Kallasandra M. Boulay	SI
SIGNATURE	
	

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RECEIVED FEB 1 6 2006

SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form programs with a septic agent and provided and provi	DIVISION OF OIL, GAS AND MINING	5. LEASE DESIGNATION AND SERIAL NUMBER: Fee
TYPE OF MELL OLI WELL GAS WELL OTHER GOVERNMENT COMMISSION CONCENSION OF MEMORY CONTINUES. 1 NAME OF OPERATOR HUMBER GOVERNMENT CONTINUES. 2 NAME OF OPERATOR GOVERNMENT CONTINUES. 2 NAME OF OPERATOR GOVERNMENT CONTINUES. 3 NORTHESS OF OPERATOR GOVERNMENT CONTINUES. 4 NORTH MUMBER GOVERNMENT CONTINUES. 4 NORTH MUMBER GOVERNMENT CONTINUES. 5 NORTH MUMBER GOVERNMENT. 5 NORTH MUMBER GOVERNMENT. 5 NORTH MUMBER. 5 NORTH MUMBER. 5 NORTH MUMBER. 5 NORTH MUMBER. 5 NORTH MUMBER. 5 NORTH MUMBER. 5 NORTH MUMBER. 5 NORTH MUMBER. 5 NORTH MUMBER. 5 NORTH MUMBER. 5 NORTH MUMBER. 5 NORTH MUMBER. 5 NORTH MUMBER. 5 NORTH MUMBER. 5 NORTH MUMBER. 5 NORTH MUMBER. 5 NORTH MUMBER. 5 NORTH MUMBER. 5 NORTH	SUNDRY NOTICES AND REPORTS ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
NAME OF DEPENDENT NATURAL OF STATE OF A SWELL OTHER SHOWER OF STATE OF A SWELL OF STATE OF A SWELL OF STATE OF A SWELL OF STATE OF A SWELL OF SWELL	drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	7. UNIT or CA AGREEMENT NAME:
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14	01 17th St., Suite 1200	Denver STATE CO ZIP 8020	PHONE NUMBER: (303) 298-8100	10. FIELD AND POOL, OR WILDCAT: Castlegate
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NAME (PLEASE PRINT) Kallasandra M. Boulay	тітье Engineering Analyst
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12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent	details including dates, depths, volumes, etc.
Please be advised that there has been no activity with this well si	nce last report.
After further review of this well, Pioneer has determined that the development of a new horizontal well and spacing issues.	State of Utah required this well to be shut-in due to the
,	
Pioneer has determined that, unless required by the State of Utal	n, we will not continue to file a monthly well status report.
NAME (PLEASE PRINT) Kaljasandra M. Boulay	TITLE Engineering Analyst
SIGNATURE	DATE 8/1/2006
SIGNATURE 4	

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United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Utah State Office P.O. Box 45155 Salt Lake City, UT 84145-0155



IN REPLY REFER TO 3105 UT-922

NOV 0 8 2006

Pioneer Natural Resources USA, Inc. Attn: Sharon Logan 1401 17th Street, Suite 1200

Denver, CO 80202

43-007-30718 T125 RNE Sec. 18

Gentlemen:

Enclosed is one approved copy of Communitization Agreement No. UTU84719. This agreement communitizes all rights as to natural gas and associated liquid hydrocarbons producible from the Blackhawk Formation, covering the E½ of Section 18, Township 12 South, Range 10 East, SLB&M, Carbon County, Utah. This agreement conforms with the spacing set forth in Order No. 220-06 which was issued by the State of Utah, Board of Oil, Gas and Mining on May 18, 2005.

This agreement is effective as of November 1, 2006. The communitized area covers 320.00 acres and includes portions of Federal oil and gas lease UTU77283.

Approval of this agreement does not warrant or certify that the operator thereof and other holders of operating rights hold legal or equitable title to those rights in the subject leases which are committed hereto.

Minerals Management Service Form MMS-4054, "Oil & Gas Operations Report", must be submitted for this agreement beginning with the month in which drilling operations commence for Huber Jensen Well No. 1-18, NESE, Section 18, Township 12 South, Range 10 East, SLB&M, Carbon County, Utah, API # 43-007-30718, on a fee lease. Form MMS-4054 is to be mailed to the Minerals Management Service, Minerals Revenue Management Reporting Services, P. O. Box 17110, Denver, Colorado 80217-0110.

Please furnish all interested principals with necessary evidence of this approval.

Sincerely,

/s/ Douglas F. Cook

Douglas F. Cook Chief, Branch of Fluid Minerals

Enclosure

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bcc: Minerals Adjudication Group w/enclosure Moab Field Office w/enclosure

Moab Field Office w/enclosure Division Oil, Gas & Mining

SITLA

File - UTU84719

MMS - Data Management Division (Attn: James Sykes)

Agr. Sec. Chron. Reading File Central Files

UT922:CSeare:cs(12/7/06)Pioneer

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NAM	E (FLEASE PRINT)				TITLE	·	,	
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			RECEIVED JUN 2 8 2007 DIV. OF OIL. GAS & MINING
lov Δ. Zieo	aler	Senior Engineer	
NAME (PLEASE PRINT) Joy A. Zieg		111111	
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				-			<u> </u>				+	Poz				+			+	
25. TUBING RECOR	<u> </u>						<u> </u>		l			·								
SIZE		SET (MD)	PACK	ER SET (M	D)	SIZE	<u> </u>	DEPTH	SET (MD	PACI	KER	SET (MD)		SIZE	T	DEPTI	H SET (MD)	PACKER	SET (MD)
2-7/8		.311		·																
26. PRODUCING IN	ITERVALS	MUR	$\overline{\Omega}$							27. PERI	FOR	ATION REC	ORD							
FORMATION	NAME		(MD)	BOTTON	M (MD)		(TVD)		M (TVD)			(Top/Bot - !		SIZE	NO. HO	$\overline{}$		ERFOR	RATION ST	
(A) Blackhaw	k Coal	4,1	108	4,3	03	4,	108	4,3	303	4,108			122	3-1/8	18		Ореп	井	Squeezed	
(B)							<u> </u>			4,287	_			3-1/8	20	$\overline{}$	Open	쓹	Squeezed	
(C)										4,230				3-1/8	20		<u> </u>		Squeezed	=
(D)								<u> </u>		4,255	5	4,	263	3-1/8	20	<u> </u>	Ореп	<u>Z</u>	Squeezec	<u> </u>
28. ACID, FRACTU	RE, TREATI	MENT, CEME	ENT SQUI	EEZE, ETC											DE	CE	-177			
DEPTH	INTERVAL		ļ						AM	OUNT AN	ID TY	PE OF MAT	ERIAL		RE	UE	<u> </u>	_ <u>_</u>		
4287-4296				al NEF											JUL	<u> </u>	9 20	107 -		
4208-4313 /	4118-4	297		224 g			100 s	x Jord	an 20	40 sd										
4230-38 / 42			Frac	75,50	0# 30	/50								DIV.	OF O	IL. G	iAS &	MIM	LSTATUS	10
=	TRICAL/MEC	:HANICAL LO		CEMENT	VERIFIC	ATION		GEOLOG	IC REPOF	ατ [=	ST REPOR	т [_	TIONAL				roduc	
		. 5 2000									_									

 ILITE A I	PRODUCTION

INTERVAL A (As shown in item #26)

DATE FIRST PR 11/18/200		TEST DATE: 11/26/20	06	HOURS TESTED	o: 24	TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF: 58	WATER - BBL: 177	PROD. METHOD: Pumping
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS MCF: 58	WATER - BBL: 177	Producing
				INT	ERVAL B (As sho	wn in item #26)				
DATE FIRST PR	RODUCED:	TEST DATE:		HOURS TESTED	D :	TEST PRODUCTION RATES: →	OIL - BBL:	GAS – MCF:	WATER BBL:	PROD. METHOD:
CHOKE SIZE:	TBG, PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS - MCF:	WATER - BBL:	INTERVAL STATUS:
				INT	ERVAL C (As sho	wn in item #26)				
DATÉ FIRST PR	RODUCED:	TEST DATE:		HOURS TESTER	D :	TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER - BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL BBL:	GAS - MCF:	WATER - BBL:	INTERVAL STATUS:
	<u> </u>			INT	ERVAL D (As sho	wn in item #26)				
DATE FIRST PR	RODUCED:	TEST DATE:		HOURS TESTED	D :	TEST PRODUCTION RATES: →	OIL – BBL:	GAS - MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL - BBL:	GAS - MCF:	WATER - BBL:	INTERVAL STATUS:
32. DISPOSITION Sold	ON OF GAS (Sold	, Used for Fuel, Vo	ented, Etc.)	•			-			
33. SUMMARY	OF POROUS ZO	IES (Include Aqui	fers):			3	4. FORMATION	(Log) MARKERS:		

Formation	Top (MD)	Bottom (MD)	Descriptions, Contents, etc.	Name	Top (Measured Depth)
			See attached Core Analysis	Price River Castlegate Blackhawk Aberdeen	2,100 3.110 3,420 4,306

35. ADDITIONAL REMARKS (Include plugging procedure)

#27: Additional Perfs: 4140-48, 4180-88' 3-1/8" 64 holes - Open;

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

#28: Additional Frac: Frac 4140-48, 4180-88 w/108,000# 30/50, Total N2 SCF 30,000

36	I hereby certify that the foregoing	and attached information is complete and	d correct as determined from all available records.

NAME (PLEASE PRINT) Joy A. Ziegler

SIGNATURE

DATE

Senior Engineering Tech

7/5/2007

This report must be submitted within 30 days of

- completing or plugging a new well
- drilling horizontal laterals from an existing well bore
- · recompleting to a different producing formation
- · reentering a previously plugged and abandoned well
- significantly deepening an existing well bore below the previous bottom-hole depth
- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests

* ITEM 20: Show the number of completions if production is measured separately from two or more formations.

** ITEM 24: Cement Top – Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to:

Utah Division of Oil, Gas and Mining 1594 West North Temple, Suite 1210

Box 145801

Salt Lake City, Utah 84114-5801

Phone: 801-538-5340

Fax: 801-359-3940

Division of Oil, Gas and Mining OPERATOR CHANGE WORKSHEET (for state use only)

ROUTING
1. DJJ
2 CDW

V Charactor (W. H.C. 11)				_				2. CDW		
X - Change of Operator (Well Sold) The operator of the well(s) listed below has changed, effective:				Operator Name Change/Merger 4/1/2010						
Phone: 1 (303) 675-2610				Phone: 1 (303)	979-6023					
CA No.			***************************************	Unit:						
WELL NAME	SEC	TWI	RNG	API NO	ENTITY	LEASE TYPE		WELL		
SEE ATTACHED LIST					NO		TYPE	STATUS		
OPERATOR CHANGES DOCUMENT	ΔΤΙ	ΩN								
Enter date after each listed item is completed	ZX II I	OI								
1. (R649-8-10) Sundry or legal documentation wa	as rece	eived f	from the	FORMER one	erator on:	6/3/2010				
2. (R649-8-10) Sundry or legal documentation wa						6/3/2010	-			
3. The new company was checked on the Depart i				_			-	5/10/2010		
4a. Is the new operator registered in the State of U		01 001		Business Numbe		7624076-0142		3/10/2010		
5a. (R649-9-2)Waste Management Plan has been re		d on:		-	Requested		-			
5b. Inspections of LA PA state/fee well sites comp					- Nequesteu	9/13/2010				
*				n/a	-					
5c. Reports current for Production/Disposition & S				ok	-					
6. Federal and Indian Lease Wells: The BL						me change,				
or operator change for all wells listed on Feder	al or I	ndian	leases o	on:	BLM	not yet	BIA	_		
7. Federal and Indian Units:										
The BLM or BIA has approved the successor					•	<u>n/a</u>	•			
8. Federal and Indian Communization Ag	•	•								
The BLM or BIA has approved the operator in				n/a						
9. Underground Injection Control ("UIC"	') Di	vision	i has ap	pproved UIC F	orm 5 Trai	nsfer of Author	ity to			
Inject, for the enhanced/secondary recovery un	it/pro	ject fo	r the wa	ater disposal wel	ll(s) listed o	n:	*	Being held		
DATA ENTRY:										
1. Changes entered in the Oil and Gas Database		- CI		6/30/2010	-	C 10 0 10 0 1 0				
2. Changes have been entered on the Monthly Op3. Bond information entered in RBDMS on:	oerato	or Cha	ange Sp			6/30/2010				
 Fee/State wells attached to bond in RBDMS on 				6/30/2010	•					
5. Injection Projects to new operator in RBDMS of				<u>6/30/2010</u> *	•					
6. Receipt of Acceptance of Drilling Procedures f		D/Nev	v on·		6/30/2010					
BOND VERIFICATION:	01 111	271101	v OII.		0/30/2010					
Federal well(s) covered by Bond Number:				B005638						
2. Indian well(s) covered by Bond Number:				n/a	•					
3a. (R649-3-1) The NEW operator of any state/fe	e well	l(s) list	ted cove		ımber	B005639	and B0056	550		
3b. The FORMER operator has requested a release					n/a		- D0050	,50		
LEASE INTEREST OWNER NOTIFIC		_	a viii ti	ion cond on.	ı u	•		•		
4. (R649-2-10) The NEW operator of the fee wells			ntacted	and informed b	v a letter fr	om the Division				
of their responsibility to notify all interest owner	rs of t	his cha	ange on	:	6/30/2010	m uic Divisioii				
COMMENTS:			-53 011	-	5,50,2010					

	FORM				
I		5. LEASE DESIGNATION AND SERIAL NUMBER:			
SUNDRY	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:				
Do not use this form for proposals to drill no drill horizontal la	7. UNIT or CA AGREEMENT NAME:				
TYPE OF WELL OIL WELL	GAS WELL 🗸 OTHER			8. WELL NAME and NUMBER:	
2. NAME OF OPERATOR:				See Attached List 9. API NUMBER:	
Blue Tip Castlegate, Inc.	N 3680			9. API NUMBER:	
ADDRESS OF OPERATOR: 15810 Park Ten Place - Ste 160 CITY		77084	PHONE NUMBER: (303) 979-6023	10. FIELD AND POOL, OR WILDCAT:	
4. LOCATION OF WELL					
FOOTAGES AT SURFACE:				COUNTY: Carbon	
QTR/QTR, SECTION, TOWNSHIP, RANGE	GE, MERIDIAN:			STATE: UTAH	
11. CHECK APPF	ROPRIATE BOXES TO INDICAT	E NATURE	OF NOTICE, REPO	RT, OR OTHER DATA	
TYPE OF SUBMISSION		Τ'	YPE OF ACTION		
✓ NOTICE OF INTENT	ACIDIZE	DEEPEN		REPERFORATE CURRENT FORMATION	
(Submit in Duplicate)	ALTER CASING	FRACTURE	TREAT	SIDETRACK TO REPAIR WELL	
Approximate date work will start:	CASING REPAIR	NEW CONS	TRUCTION	TEMPORARILY ABANDON	
4/1/2010	CHANGE TO PREVIOUS PLANS	✓ OPERATOR	CHANGE	TUBING REPAIR	
	CHANGE TUBING	PLUG AND	ABANDON	VENT OR FLARE	
SUBSEQUENT REPORT	CHANGE WELL NAME	PLUG BACK	<	WATER DISPOSAL	
(Submit Original Form Only) Date of work completion:	CHANGE WELL STATUS	PRODUCTIO	ON (START/RESUME)	WATER SHUT-OFF	
Date of work completion.	COMMINGLE PRODUCING FORMATIONS	RECLAMAT	ION OF WELL SITE	OTHER:	
**************************************	CONVERT WELL TYPE	RECOMPLE	ETE - DIFFERENT FORMATION		
Blue Tip Castlegate, Inc. hattached well list. The effective Betty Brownson Attorney-In-Fact	ompleted operations. Clearly show all phas acquired all of Pioneer Natural ective date of change of operator Date S USA, Inc. N 5/55 200	BIL BIL BIL BIL BIL 150 Ho St	USA, Inc's interest	Date Date 160 023 639	
NAME (PLEASE PRINT) Bruce L. T	A / 1	тті	Manager VIC	e Presiden + **	

(This space for State use only)

APPROVED 6 130 12010

Carlene Russell
Division of Oil, Gas and Mining
Earlene Russell, Engineering Technician

(See Instructions on Reverse Side)

RECEIVED

JUN 0 3 2010

PIONEER NATURAL RESOURCES (N5155) to BLUE TIP CASTLEGATE (N3680)

well name	sec	twp	rng	api	entity	lease	type	stat	IC
SHIMMIN TRUST 5-14-12-10	14	_		4300730122	14175	Fee	type GW	P	+
CASTLEGATE FED 7-9-12-10	09			4300730137	12991	Federal	GW	P	╁
JENSEN 9-10-12-10	10	4		4300730159	12906	Fee	GW	P	+
JENSEN 5-10-12-10	10	120S		4300730162	12905	Fee	GW	S	┿
JENSEN 16-9-12-10	09	120S		4300730163	12904	Fee	GW	P	十
JENSEN 11-10-12-10	10	120S		4300730164	11405	Fee	GW	P	+-
SHIMMIN TRUST 11-11-12-10	11	120S		4300730166	11410	Fee	GW	P	+
CASTLEGATE ST 1-16-12-10	16	120S		4300730589	12610	State	GW	P	+
JENSEN 1-10-12-10	10	120S		4300730596	12611	Fee	GW	P	+
SHIMMIN TRUST 2-11-12-10	11	120S		4300730659	13070	Fee	GW	P	+-
SHIMMIN TRUST 4-14-12-10	14	120S	100E	4300730662	13071	Fee	GW	P	\forall
SHIMMIN TRUST 1-11-12-10	11	120S	100E	4300730673	12901	Fee	GW	P	†
JENSEN 2-10-12-10	10	120S	100E	4300730675	14225	Fee	GW	OPS	\forall
JENSEN 1-9-12-10	09	120S	100E	4300730717	12903	Fee	GW	P	T
JENSEN 1-18-12-10	18	120S	100E	4300730718	14226	Fee	GW	P	H
JENSEN 1-4-12-10	04	120S	100E	4300730733	13068	Fee	GW	P	\forall
JENSEN 2-8-12-10	08	120S	100E	4300730734	13275	Fee	GW	P	H
JENSEN 2-9-12-10	09	120S	100E	4300730735	13317	Fee	GW	P	H
JENSEN 1-15-12-10	15	120S	100E	4300730736	13072	Fee	GW	P	\Box
JENSEN 1-8-12-10	08	120S	100E	4300730768	13359	Fee	GW	P	П
CASTLEGATE ST 4-16-12-10	16	120S	100E	4300730785	13318	State	GW	P	\Box
JENSEN DEEP 7-15-12-10	15	120S	100E	4300730786	13247	Fee	GW	S	П
CASTLEGATE ST 11-16H-12-10	16	120S	100E	4300730961	14224	State	GW	S	П
SHIMMIN 11-14-12-10	14	120S	100E	4300730962	14223	Fee	GW	OPS	П
JENSEN 23C-9-12-10	09	120S	100E	4300731211	15770	Fee	GW	P	П
JENSEN 33C-9-12-10	09	120S	100E	4300731212	15769	Fee	GW	P	П
JENSEN 42C-9-12-10			100E	4300731213	15766	Fee	GW	P	П
JENSEN 43C-9-12-10		120S	100E	4300731214	15768	Fee	GW	P	С
CASTLEGATE FED 22C-9-12-10				4300731225	15767	Federal	GW	P	П
JENSEN 41C-9-12-10				4300731452	17246	Fee	GW	OPS	С
JENSEN 14C-10-12-10				4300731453	17235	Fee	GW	P	П
JENSEN FED 14C-3-12-10				4300731495		Federal	GW	APD	C
JENSEN FED 22C-10-12-10				4300731498		Federal	GW	APD	C
JENSEN FED 11C-10-12-10				4300731499		Federal	GW	APD	C
JENSEN 14C-4-12-10				4300731500		Fee	GW	APD	C
JENSEN 44C-4-12-10				4300731501		Fee	GW	APD	C
JENSEN 44C-5-12-10				4300731502		Fee	GW	APD	C
JENSEN 34C-9-12-10				4300731503		Fee	GW	APD	C
JENSEN 31C-9-12-10				4300731504		Fee	GW	APD	C
JENSEN 14C-9-12-10				4300731505		Fee	GW	APD	C
JENSEN 11C-9-12-10				4300731506		Fee	GW	APD	С
JENSEN 24C-9-12-10				4300731507		Fee	GW	APD	C
JENSEN ST 11C-34-11-9	34	110S	090E	4304930024	17071	State	GW	S	С



State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

September 3, 2014

•

Mr. Mike Cerelli Blue Tip Castlegate, Inc. 14905 120TH RD Erie, KS 66733 CERTIFIED MAIL NO.: 7011 2970 0001 8828 1573 43 007 30718 Sensen 1-18-12-10 18 125 10E

Subject: Extended Shut-in and Temporary Abandoned Well Requirements for Fee or State Leases

Dear Mr. Cerelli:

As of April 2014, Blue Tip Castlegate, Inc. (Blue Tip) has three (3) State Lease Wells and three (3) Fee Lease Wells (see attachment A) that are currently in non-compliance with the requirements for extended shut-in or temporarily abandoned (SI/TA) status.

Two of these wells (attachment A) have previously been issued notices of non-compliance and have remained in non-compliance. Both wells are over five (5) years shut-in (attachment A) and must comply with R649-3-36-1.3.3 as stated below.

Blue Tip shall immediately submit plans and timeframes for each well stating which wells will be plugged, placed back on production, or requesting SI/TA extension with proof of wellbore integrity and good cause for such request. All wells need an individual sundry filed and are required to meet the SI/TA rules as listed below.

Wells SI/TA beyond twelve (12) consecutive months requires filing a Sundry Notice (R649-3-36-1). Wells with five (5) years non-activity or non-productivity shall be plugged, unless the Division grants approval for extended shut-in time upon a showing of good cause by the operator (649-3-36-1.3.3). For extended SI/TA consideration the operator shall provide the Utah Division of Oil, Gas & Mining with the following:

- 1. Reasons for SI/TA of the well (R649-3-36-1.1)
- 2. The length of time the well is expected to be SI/TA (R649-3-36-1.2), and
- 3. An explanation and supporting data if necessary, for showing the well has integrity, meaning that the casing, cement, equipment condition, static fluid level, pressure, existence or absence of Underground Sources of Drinking Water and other factors do not make the well a risk to public health and safety or the environment (R649-3-36-1.3)

Please note that the Divisions preferred method for showing well integrity is by MIT

Page 2 Blue Tip Castlegate, Inc. September 3, 2014

Submitting the information suggested below may help show well integrity and may help qualify your well for extended SI/TA. Note: As of July 1, 2003, wells in violation of the SI/TA rule R649-3-36 may be subject to full cost bonding (R649-3-1-4.2, 4.3).

- 1. Wellbore diagram, and
- 2. Copy of recent casing pressure test, and
- 3. Current pressures on the wellbore (tubing pressure, casing pressure, and casing/casing annuli pressure) showing wellbore has integrity, and
- 4. Fluid level in the wellbore, and
- 5. An explanation of how the submitted information proves integrity.

If the required information is not received within 30 days of the date of this notice, further actions may be initiated. If you have any questions concerning this matter, please contact me at (801) 538-5281.

Sincerely,

Dustin K. Doucet Petroleum Engineer

DKD/JP/js

cc: Compliance File Well File LaVonne Garrison, SITLA

N:\O&G Reviewed Docs\ChronFile\PetroleumEngineer\SITA

Attachment A

	Well Name	API	LEASE	Years Inactive	Prior Notice
1	CASTLEGATE ST 11-16H-12-10	43-007-30961	ML-44443	7 years 10 months	2 ND NOTICE
2	JENSEN ST 11C-34-11-9	43-049-30024	ML-48060	5 years 1 month	2 ND NOTICE
3	JENSEN 1-18-12-10	43-007-30718	FEE	2 years 5 months	
4	JENSEN 1-15-12-10	43-007-30736	FEE	2 years 11 months	
5	CASTLEGATE ST 4-16-12-10	43-007-30785	ML-44443	2 years 8 months	
6	JENSEN DEEP 7-15-12-10	43-007-30786	FEE	1 year 11 months	





State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

June 25, 2015

CERTIFIED MAIL NO. 7014 2870 0001 4232 4504

43 007 30718 Jensen 1-18-12-10 18 125 10E

Ms. Wendy Clemente Blue Tip Castlegate, Inc. 15810 Park Ten Place, Suite 160 Houston, TX 77084

Subject: Extended Shut-in and Temporary Abandoned Well Requirements for Fee or State Leases

Dear Ms. Clemente:

As of January 2015, Blue Tip Castlegate, Inc. (Blue Tip) has three (3) State Lease Wells and four (4) Fee Lease Wells (see attachment A) that are currently in non-compliance with the requirements for extended shut-in or temporarily abandoned (SI/TA) status. Three (3) of these wells were added to Blue Tip's SI/TA list in 2015 (attachment A).

The Castlegate ST 11-16H-12-10, Jensen ST 11C-34-11-9, Jensen 1-18-12-10, and Castlegate ST 4-16-12-10 wells (attachment A) have previously been issued notices of noncompliance. Blue Tip submitted requests for extended SI/TA status for these wells in September 2014. The Division denied the request due to Blue Tip failing to provide the necessary information showing good cause or wellbore integrity as required by rule R649-3-36. The Castlegate ST 11-16H-12-10 and Jensen ST 11C-34-11-9 wells are over five (5) years shut-in (attachment A) and must comply with R649-3-36-1.3.3 as stated below.

Blue Tip shall immediately submit plans and timeframes for each well stating which wells will be plugged, placed back on production, or requesting SI/TA extension with proof of wellbore integrity and good cause for such request. Each well needs an individual sundry filed meeting the SI/TA rules as listed below.

Wells SI/TA beyond twelve (12) consecutive months requires filing a Sundry Notice via ePermit (R649-3-36-1). Wells with five (5) years non-activity or non-productivity shall be plugged, unless the Division grants approval for extended shut-in time upon a showing of good cause by the operator (649-3-36-1.3.3). For extended SI/TA consideration the operator shall provide the Utah Division of Oil, Gas & Mining with the following:



Page 2 Blue Tip Castlegate, Inc. June 25, 2015

- 1. Reasons for SI/TA of the well (R649-3-36-1.1)
- 2. The length of time the well is expected to be SI/TA (R649-3-36-1.2), and
- 3. An explanation and supporting data if necessary, for showing the well has integrity, meaning that the casing, cement, equipment condition, static fluid level, pressure, existence or absence of Underground Sources of Drinking Water and other factors do not make the well a risk to public health and safety or the environment (R649-3-36-1.3).

Please note that the Divisions preferred method for showing well integrity is by MIT

Submitting the information suggested below may help show well integrity and may help qualify your well for extended SI/TA. Note: As of July 1, 2003, wells in violation of the SI/TA rule R649-3-36 may be subject to full cost bonding (R649-3-1-4.2, 4.3).

- 1. Wellbore diagram, and
- 2. Copy of recent casing pressure test, and
- 3. Current pressures on the wellbore (tubing pressure, casing pressure, and casing/casing annuli pressure) showing wellbore has integrity, and
- 4. Fluid level in the wellbore, and
- 5. An explanation of how the submitted information proves integrity.

All Submittals should be sent via ePermit

If the required information is not received within 30 days of the date of this notice, further actions may be initiated. If you have any questions concerning this matter, please contact me at (801) 538-5281.

Sincerely,

Dustin K. Doucet Petroleum Engineer

DKD/JP/js Enclosure

cc: Compliance File Well File

LaVonne Garrison, SITLA

N:\O&G Reviewed Docs\ChronFile\PetroleumEngineer\SITA

Attachment A

	Well Name	API	LEASE	Years Inactive	Prior Notice
1	CASTLEGATE ST 11-16H-12-10	43-007-30961	ML-44443	8 years 7 Months	Reissued 2 ND NOTICE
2	JENSEN ST 11C-34-11-9	43-049-30024	ML-48060	5 years 4 months	Reissued 2 ND NOTICE
3	JENSEN 1-18-12-10	43-007-30718	FEE	3 years 2 months	NOTICED
4	CASTLEGATE ST 4-16-12-10	43-007-30785	ML-44443	3 years 5 months	NOTICED
5	SHIMMIN TRUST 5-14-12-10	43-007-30122	FEE	1 year 1 month	
6	SHIMMIN TRUST 11-11-12-10	43-007-30166	FEE	1 year 8 months	
7	SHIMMIN TRUST 1-11-12-10	43-007-30673	FEE	1 year 3 months	

			FORM 9
	STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES		
	DIVISION OF OIL, GAS, AND MININ		5.LEASE DESIGNATION AND SERIAL NUMBER: FEE
SUNDF	RY NOTICES AND REPORTS OF	N WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
	oposals to drill new wells, significantly de reenter plugged wells, or to drill horizonta n for such proposals.		7.UNIT or CA AGREEMENT NAME:
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: JENSEN 1-18-12-10
2. NAME OF OPERATOR: BLUE TIP CASTLEGATE, INC).		9. API NUMBER: 43007307180000
3. ADDRESS OF OPERATOR: 1205 Independence Ave. ,		HONE NUMBER: 12-1749 Ext	9. FIELD and POOL or WILDCAT: CASTLEGATE
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1380 FSL 0855 FEL			COUNTY: CARBON
QTR/QTR, SECTION, TOWNS	HIP, RANGE, MERIDIAN: 8 Township: 12.0S Range: 10.0E Meridian	: S	STATE: UTAH
11. CHEC	K APPROPRIATE BOXES TO INDICATE	NATURE OF NOTICE, REPOR	RT, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
	ACIDIZE	ALTER CASING	CASING REPAIR
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME
10/31/2015	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE
SUBSEQUENT REPORT	DEEPEN	FRACTURE TREAT	☐ NEW CONSTRUCTION
Date of Work Completion:	□ OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK
		1	
SPUD REPORT Date of Spud:	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
Date of Space.	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	LI TEMPORARY ABANDON
	L TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL
DRILLING REPORT Report Date:	WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION
	WILDCAT WELL DETERMINATION	OTHER	OTHER:
12. DESCRIBE PROPOSED OR	COMPLETED OPERATIONS. Clearly show all		A Process Committee Commit
			proved by the hh Division of
			Gas and Mining
		00	ctober 19, 2015
		Date:	
		Ву:	let Klunt
		Please Rev	iew Attached Conditions of Approval
NAME (PLEASE PRINT)	PHONE NUMBER	TITLE	
Wendy Clemente	720 924-2036	Legal/Operations Assistan	t
SIGNATURE N/A		DATE 8/20/2015	



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Sundry Conditions of Approval Well Number 43007307180000

1. Notify the Division at least 24 hours prior to conducting abandonment operations. Please call Dan Jarvis at 801-538-5338. 2. Move Plug #2: A 100' cement plug (+/- 23 sx) shall be balanced from 3230' to 3130' to isolate the liner top. 3. Move Plug #3: Move downhole to 2200'-2000' (+/- 60 sx) to isolate the Price River formation. 4. Amend Plug #4: 200' is 60 sx of cement, not 23 sx as written up. 5. Amend Plug #5: 100' minimum plug required (30 sx inside, 15 sx outside). 6. All balanced plugs shall be tagged to ensure that they are at the depth specified. 7. All annuli shall be cemented from a minimum depth of 100' to the surface. 8. Surface reclamation shall be done in accordance with R649-3-34 – Well Site Restoration. 9. All requirements in the Oil and Gas Conservation General Rule R649-3-24 shall apply. 10. If there are any changes to the procedure or the wellbore configuration, notify Dustin Doucet at 801-538-5281 (office) or 801-733-0983 (home) prior to continuing with the procedure. 11. All other requirements for notice and reporting in the Oil and Gas Conservation General Rules shall apply.

9/17/2015

Wellbore Diagram г263 API Well No: 43-007-30718-00-00 Permit No: Well Name/No: JENSEN 1-18-12-10 Company Name: BLUE TIP CASTLEGATE, INC. Location: Sec: 18 T: 12S R: 10E Spot: NESE **String Information** Coordinates: X: 513752 Y: 4403387 **Bottom** Diameter Weight Length String (ft sub) (inches) (lb/ft) (ft) Field Name: CASTLEGATE HOL1 490 17.5 County Name: CARBON **SURF** 490 13.375 54.5 490 EU (001/(1.15)(2922)=3054 OUT 1005 ((1.15)(5,043)=1596 HOL2 3520 12.25 2 922 11 3520 8.625 32 3520 HOL3 4638 7.875 PROD Cement from 490 ft. to surface 4638 5.5 17 7-661 4638 4311 2.875 Surface: 13.375 in. @ 490 ft. 88" X 56" Hole: 17.5 in. @ 490 ft. #44 5.643 **Cement Information** 1000 BOC TOC String Class Sacks (ft sub) (ft sub) 200 × Plug th 3 50+0 2100' - Note: 23×=77 × Pump Gost 200'((1.15)(2.922)=60× 3520 UK 500 592 2100 PROD 4638 3179 PC 320 **SURF** 490 0 G 250 **Perforation Information** CSUGT * Move Play # 2 (3230 to 3130)

50 (1.5) (7,661) = 6 54

70 (175) (2922) = 57

Cement from 3520 ft 15 547 Top **Bottom** Shts/Ft No Shts Dt Squeeze (ft sub) (ft sub) 4108 4122 4287 4297 4263 Intermediate: 8.625 in. @ 3520 ft. **Formation Information** Hole: 12.25 in. @ 3520 ft. ± 4(00) BLKHK 3420 - H2D

BMSW 4100

ABERD 4306

(LIS)(Flagstaff Surf H2D

TO' APD - Act.

BIKHIOK

POLE 4020 North Horn - 950 H2D, 750?

BIKHIOK **Formation** Depth Binsco 8elow (1305K) (1.15) (7:661)=1145 Box QTD must Cement from 4638 ft. to 3179 ft. Tubing: 2,875 in. @ 4311 ft. 1(287) Production: 5.5 in. @ 4638 ft. (874)(1,15)(7,466)-Hole: 7.875 in. @ 4638 ft. Hole: Unknown ange 4592 TD: 4640 TVD: 4640 PBTD: 4592

STATE OF UTAH

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS DV IN Use the form for propagate to differe well, applications report existing made served current broad-red wells, report applications of the control to applications. 1. TYPE OF WILL. OIL WELL GAS WELL OTHER PROPAGASE PROPAGASE 3. ADDRESS OF OPERATOR: 3. ADDRESS OF OPERATOR: 3. ADDRESS OF OPERATOR: 3. ADDRESS OF OPERATOR: 3. ADDRESS OF OPERATOR: 3. ADDRESS OF OPERATOR: 3. ADDRESS OF OPERATOR: 3. ADDRESS OF OPERATOR: 3. ADDRESS OF OPERATOR: 4. LOCATION OF WELL 11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA TYPE OF SUBMISSION TYPE OF ACTION 3. ADDRESS OF OPERATOR: 4. COUNTY: OIL WELL ADDRESS OF OPERATOR: OIL WELL ADDRESS OF OPERATION: OIL WELL ADDRESS OF OPERATION: OIL WELL ADDRESS OF OPERATION: OIL WELL ADDRESS OF OPERATION: OIL WELL ADDRESS OF OPERATION: OIL WELL ADDRESS OF OPERATION: OIL WELL ADDRESS OF OPERATION: OIL WELL ADDRESS OF OPERATION: OIL WELL ADDRESS OF OPERATION: OIL WELL ADDRESS OF OPERATION: OIL WELL ADDRESS OF OPERATION: OIL WELL ADDRESS OF OPERATION: OIL WELL ADDRESS OF OPERATION: OIL WELL ADDRESS OF OPERATION:		DEPARTMENT OF NATURAL RESOURCE DIVISION OF OIL, GAS AND MIN		5. LEASE DESIGNATION AND SERIAL NUMBER:
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SIGNATURE DATE	NAME (PLEASE PRINT)		TITLE	
	SIGNATURE		DATE	

(This space for State use only)

RECEIVED: Aug. 20, 2015

INSTRUCTIONS

This form shall be submitted by the operator to show the intention and/or completion of the following:

- miscellaneous work projects and actions for which other specific report forms do not exist;
- all other work and events as identified in section 11, Type of Action, or as required by the Utah Oil and Gas Conservation General Rules, including:
 - minor deepening of an existing well bore,
 - plugging back a well,
 - recompleting to a different producing formation within an existing well bore (intent only),
 - reperforating the current producing formation,
 - drilling a sidetrack to repair a well,
 - reporting monthly the status of each drilling well.

This form is not to be used for proposals to

- drill new wells,
- reenter previously plugged and abandoned wells,
- significantly deepen existing wells below their current bottom-hole depth,
- drill horizontal laterals from an existing well bore,
- drill hydrocarbon exploratory holes such as core samples and stratigraphic tests.

Use Form 3, Application for Permit to Drill (APD) for such proposals.

NOTICE OF INTENT - A notice of intention to do work on a well or to change plans previously approved shall be submitted in duplicate and must be received and approved by the division before the work is commenced. The operator is responsible for receipt of the notice by the division in ample time for proper consideration and action. In cases of emergency, the operator may obtain verbal approval to commence work. Within five days after receiving verbal approval, the operator shall submit a Sundry Notice describing the work and acknowledging the verbal approval.

SUBSEQUENT REPORT - A subsequent report shall be submitted to the division within 30 days of the completion of the outlined work. Specific details of the work performed should be provided, including dates, well depths, placement of plugs, etc.

WELL ABANDONMENT - Proposals to abandon a well and subsequent reports of abandonment should include reasons for the abandonment; data on any former or present productive zones, or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, and method of parting of any casing, liner, or tubing pulled and the depth to top of any left in the hole; method of closing top of well; and date well site conditioned for final inspection looking to approval of the abandonment.

In addition to any Sundry Notice forms submitted, **Form 8, Well Completion or Recompletion Report and Log** must be submitted to the division to report the results of the following operations:

- completing or plugging a new well,
- reentering a previously plugged and abandoned well,
- significantly deepening an existing well bore below the current bottom-hole depth,
- drilling horizontal laterals from an existing well bore,
- drilling hydrocarbon exploratory holes such as core samples and stratigraphic tests,
- recompleting to a different producing formation.

Send to:

Utah Division of Oil, Gas and Mining Phone: 801-538-5340

1594 West North Temple, Suite 1210
Box 145801 Fax: 801-359-3940

Salt Lake City, Utah 84114-5801

(5/2000)



Blue Tip Castlegate, Inc.

PLUG & ABANDON PLAN

Castlegate Jensen 1-18-12-10 1380' FSL 855' FEL NESE Sec.18 T12S-R10E Carbon County, Utah API# 43-007-30718

7/21/2015

Approved by: Mike Cerelli

Mike Cerelli Vice President-Operations

Castlegate St 4-16-12-10 Plug & Abandon Page 2 of 6

GENERAL INFORMATION

WELL NAME: Castlegate Jensen 1-18-12-10

API# 43-007-30718

LOCATION: 1380' FSL 855' FEL,

NESE Sec.18 T12S-R10E Carbon County, Utah

OBJECTIVE: Plug and abandon wellbore in accordance with UDOGM

regulations. Reclaim and seed location

TOTAL DEPTH: 4640' Initial PBTD 4592

ELEVATION: 7970' GL Drilling Rig KB=11.0'

CASING DETAIL:

Surface Casing 13 3/8", 54.5 lb/ft, J-55, ST&C landed at 490 ft KB

Surface Cement Stage 1 - 250 sks G - 500 ft KB to Surf

Intermediate 80 Jts of 8 5/8", 32 lb/ft, J-55, ST&C landed at

Casing 3520 ft KB, Float Collar at 3474 ft KB

Int. Casing Stage 1: 412 sks CBM Lite

Cement Tail: 180 sks Type 3 – 3520 to 500 ft

Liner 32 Jts of 5 ½", 17 lb/ft, J-55, ST&C landed at 4638

ft KB, Float Collar at 4592 ft KB, Hanger: 3179 ft KB

Liner Cement Stage 1: 320 sks 50/50 Poz mix 4640 – 3179 ft KB

PERFORATION DETAIL:

Тор	Bottom	SPF	Phasing	Formation
4108	4122	2	90	squeezed
4287	4287	2	90	squeezed
4230	4238	4	60	Blackhawk
4255	4263	4	60	Blackhawk
4208	4313	4	60	Blackhawk
4118	4297	4	60	Blackhawk
4140	4148	4	60	Blackhawk
4180	4188	4	60	Blackhawk

RECEIVED: Aug. 20, 2015

Castlegate St 4-16-12-10 Plug & Abandon Page 3 of 6

FORMATION TOPS:

Price River Fm	2100
Castlegate Fm	3110
Blackhawk Fm	3420
Aberdeen SS	4306

PRESSURE DATA: Not available at this time.

Castlegate St 4-16-12-10 Plug & Abandon Page 4 of 6

PLUG & ABANDON PROCEDURE

NOTE: Fresh water with Corrosion Inhibitor (Multi-Chem C-6895 ½ gallon per 1000 gal water) and Biocide (Multi-Chem B-8850 ½ gallon per 1000 gal water) will be placed between plugs. The reclamation and seeding will be scheduled to be completed during "Fall Seeding" of 2015.

- 1. Test anchors.
- 2. MIRU completion rig, BOP, and associated plugging equipment.
- 3. Fish rods, pump and tubing from hole. Suspect parted rods and maybe hole in tubing
- 4. PU bit and casing scraper dressed for 5 ½" 17 lb/ft casing. Tally in w/ 2 7/8" tubing to 4592' (PBTD). POH
- 5. RIH and set CIBP at 4592". TOH
- 6. PU retainer for 5½", 17 lb/ft casing and RIH. Set retainer @4099"
- 7. RU cement equipment. Establish injection rate.
- 8. Pump 130 sks class G cement below retainer and leave 8 sks on top (Cover 8 5/8 csg)
- 9. Set 200 ft balanced plug from 3400'-3600' 23 sks
- 10. Set 200 ft balanced plug from 1800'-2000' 23 sks
- 11. Set 200 ft balanced plug from 450'-650' 23 sks (Cover surface pipe) 13 3/8)
- 12. Set plug from 200 ft to surface 23 sks
- 13. Rig down cement equipment. Total Premium Class G Cmt 230 sks 15.8#/gal 1.15 cuft/sk 5.0 gal/sk
- 14. Top off casing with cement.
- 15. Excavate casing head. Cut off casing at least 3' below reclaimed ground elevation.

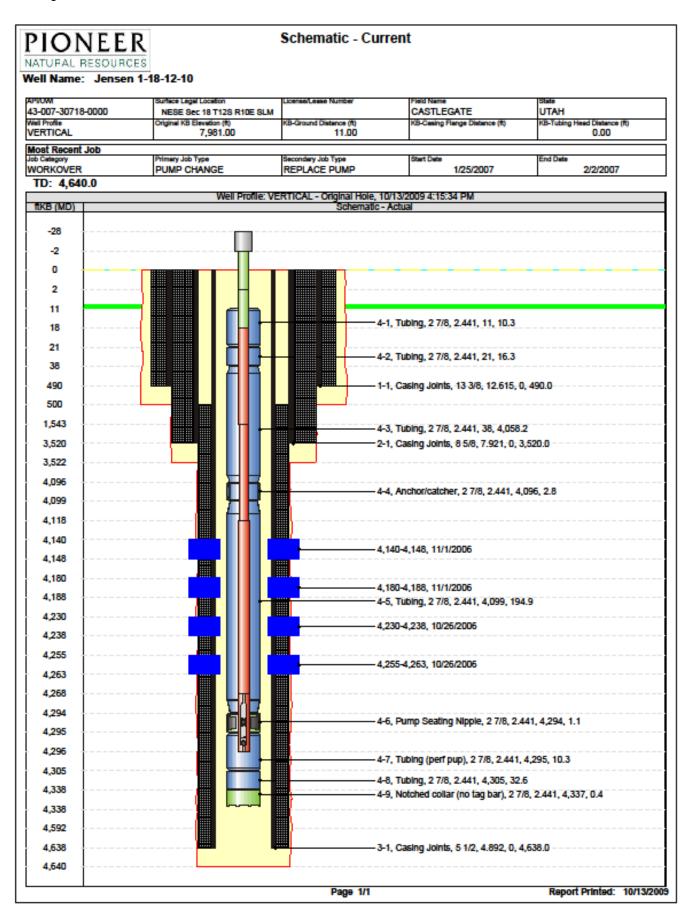
Castlegate St 4-16-12-10 Plug & Abandon Page 5 of 6

16. Install marker plate made from ¼" plate welded in place leaving a weep hole with the following information:

Blue Tip Castlegate, LLC Castlegate Jensen 1-18-12-10 1380' FSL 855' FEL, NESE Sec.18 T12S-R10E Carbon County, Utah API# 43-007-30718

- 17. Using hand held GPS, record latitude and longitude of wellhead.
- 18. Reclaim location restoring contour as close as practical to original landscape.
- 19. Seed location during the fall 2015 seeding window using the landowner requirements for seed mixture:

Castlegate St 4-16-12-10 Plug & Abandon Page 6 of 6



NOTICE OF VIOLATION STATE OF UTAH OIL AND GAS CONSERVATION ACT

TO THE FOLLOWING OPERATOR:

Operator Name: Blue Tip Castlegate

Attn: Wendy Clemente

Mailing Address: 1205 Independence Ave.

Price, UT 84501

18

12S

IDE

-		Well or Site	API#
	1	Castlegate ST 11-16H-12-10	43-007-30961
Ì	2	Jensen ST 11C-34-11-9	43-049-30024
>	3	Jensen 1-18-12-10	43-007-30718
	4	Castlegate ST 4-16-12-10	43-007-30785
[5	Shimmin Trust 5-14-12-10	43-007-30122
	6	Shimmin Trust 11-11-12-10	43-007-30166
	7	Shimmin Trust 1-11-12-10	43-007-30673

Date and Time of Inspection/Violation: April 26, 2016

Under the authority of the Utah Oil and Gas Conservation Act, Section 40-6 et. Seq., Utah Code Annotated, 1953, as amended, the undersigned authorized representative of the Division of Oil, Gas and Mining (Division) has conducted an inspection of the above described site and/or records on the above date and has found alleged violation(s) of the act, rules or permit conditions as described below.

Description of Violation(s):

Rule R649-3-36, Shut-in and Temporarily Abandoned Wells – According to Rule R649-3-36, the operator is required to supply the Division with reasons for extended SI/TA, the length of time for extended SI/TA and proof of well bore integrity for every well SI/TA over 12 consecutive months. After 5 years of continued SI/TA, the wells are to be plugged unless good cause is supplied to the Division for extended SI/TA in addition to the required information just mentioned.

Rule R649-3-4.3 Bonding – If the division finds that a well subject to this bonding rule is in violation of Rule R649-3-36, Shut –in and Temporarily Abandoned Wells, the division shall require a bond amount for the applicable well in the amount of actual plugging and site restorations costs.

Rule R649-3-4.41 Bonding – Within 30 days of notification by the division, the operator shall submit to the division an estimate of plugging and site restoration costs for division review and approval.

The first four wells listed above had P&A procedures approved October 2015 and have not yet been plugged. The next three wells were to be P&A'd this spring. The Division has not yet received sundries with plugging plans for these three wells. The last well on the list has been shut in for 2.5 years and is in violation of Rule R649-3-36. You were contacted via email on January 20, 2016, requesting a status update that you did not respond to. There is one additional well, the Shimmin Trust 2-11-12-10, API 43-007-30659, that has been shut in for 1.5 years and is in violation of Rule R649-3-36.

Compliance Deadline: May 31, 2016

Even though this well is not included in this violation, consider this as notice that this well is not in compliance and needs to be brought into compliance.

Immediate Action: For the wells subject to this notice, Blue Tip Castlegate shall fulfill full cost bonding requirements for each well. Blue Tip Castlegate shall also submit all information as required by R649-3-36 or plug and abandon or place the well(s) on production.

* Fines may be levied up to \$10,000.00 per day for every well in violation given the authority provided under U.C.A 40-6-11, part 4

This notice shall remain in effect until it is modified, terminated, or vacated by a written notice of an authorized representative of the director of the Division of Oil, Gas and Mining. Failure to comply with this notice will result in the Division pursuing further actions against said operator. Further actions may include initiation of agency actions to order full cost bonding and plugging and abandonment of wells and requests for bond forfeiture and civil penalties.

Date of Service Mailing: April 28, 2016 Certified Mail No.: 7015 0640 0003 5275 9925

Division Representative Signature Operator Representative (if presented in person)

cc: Compliance File Well Files LaVonne Garrison, SITLA

4/2016

NOTICE OF VIOLATION STATE OF UTAH OIL AND GAS CONSERVATION ACT **************************

TO THE FOLLOWING OPERATOR:

Operator Name: Blue Tip Castlegate

Blue Tip Castlegate

Attn: Wendy Clemente

Wendy Clemente

Mailing Address: 1205 Independence Ave. 15810 Park Ten Place, Ste 160

Price, UT 84501

Houston, TX 77084

	Well or Site	API#
1	Castlegate ST 11-16H-12-10	43-007-30961
2	Jensen ST 11C-34-11-9	43-049-30024
3	Jensen 1-18-12-10	43-007-30718
4	Castlegate ST 4-16-12-10	43-007-30785
5	Shimmin Trust 5-14-12-10	43-007-30122
6	Shimmin Trust 11-11-12-10	43-007-30166
7	Shimmin Trust 1-11-12-10	43-007-30673

IDE

Date and Time of Inspection/Violation: April 26, 2016

Under the authority of the Utah Oil and Gas Conservation Act, Section 40-6 et. Seq., Utah Code Annotated, 1953, as amended, the undersigned authorized representative of the Division of Oil, Gas and Mining (Division) has conducted an inspection of the above described site and/or records on the above date and has found alleged violation(s) of the act, rules or permit conditions as described below.

Description of Violation(s):

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Rule R649-3-4.41 Bonding - Within 30 days of notification by the division, the operator shall submit to the division an estimate of plugging and site restoration costs for division review and approval.

The first four wells listed above had P&A procedures approved October 2015 and have not yet been plugged. The next three wells were to be P&A'd this spring. The Division has not yet received sundries with plugging plans for these three wells. The last well on the list has been shut in for 2.5 years and is in violation of Rule R649-3-36. You were contacted via email on January 20, 2016, requesting a status update that you did not respond to. There is one additional well, the Shimmin Trust 2-11-12-10, API 43-007-30659, that has been shut in for 1.5 years and is in violation of Rule R649-3-36.

Even though this well is not included in this violation, consider this as notice that this well is not in compliance and needs to be brought into compliance.

Immediate Action: For the wells subject to this notice, Blue Tip Castlegate shall fulfill full cost bonding requirements for each well. Blue Tip Castlegate shall also submit all information as required by R649-3-36 or plug and abandon or place the well(s) on production.

* Fines may be levied up to \$10,000.00 per day for every well in violation given the authority provided under U.C.A 40-6-11, part 4

This notice shall remain in effect until it is modified, terminated, or vacated by a written notice of an authorized representative of the director of the Division of Oil, Gas and Mining. Failure to comply with this notice will result in the Division pursuing further actions against said operator. Further actions may include initiation of agency actions to order full cost bonding and plugging and abandonment of wells and requests for bond forfeiture and civil penalties.

Compliance Deadline: May 31, 2016

Date of Service Mailing: April 28, 2016 Co	ertified Mail No.: 7015 0640 0003 5275 9925 ertified Mail No.: 7015 0640 0003 5275 9994	(address change)
Division Representative Signature	Operator Representative (if presented in	person)

cc: Compliance File Well Files LaVonne Garrison, SITLA

4/2016

Division of Oil, Gas and Mining

Operator Change/Name Change Worksheet-for State use only

Effective Date:

7/1/2016

FORMER OPERATOR:	NEW OPERATOR:	
Blue Tip Castlegate, Inc. 15810 Park Ten Place, Suite 160 Houston TX 77084	Liberty Pioneer Energy Sources, Inc. 1411 East 840 North Orem UT 84097	
CA Number(s):	Unit(s): N/A	

WELL INFORMATION:

Well Name	Sec	TWN	RNG	API	Entity	Mineral	Surface	Туре	Status
See Attached List									

OPERATOR CHANGES DOCUMENTATION:

1. Sundry or legal documentation was received from the **FORMER** operator on:

7/21/2016

2. Sundry or legal documentation was received from the NEW operator on:

7/21/2016

3. New operator Division of Corporations Business Number:

6353640-0143

REVIEW:

1. Surface Agreement Sundry from **NEW** operator on Fee Surface wells received on:

N/A

2. Receipt of Acceptance of Drilling Procedures for APD on:

N/A 8/26/2016

3. Reports current for Production/Disposition & Sundries:

0,20,2010

4. OPS/SI/TA well(s) reviewed for full cost bonding:

8/26/2016

5. UIC5 on all disposal/injection/storage well(s) approved on:

8/26/2016

6. Surface Facility(s) included in operator change:

N/A

7. Inspections of PA state/fee well sites complete on (only upon operators request):

N/A

NEW OPERATOR BOND VERIFICATION:

1. Federal well(s) covered by Bond Number:

N/A UTBOOD 334

2. Indian well(s) covered by Bond Number:

DY D0016

3.State/fee well(s) covered by Bond Number(s):

RLB0012097

DATA ENTRY:

1. Well(s) update in the **OGIS** on:

8/26/2016

2. Entity Number(s) updated in OGIS on:

8/26/2016

3. Unit(s) operator number update in **OGIS** on:

N/A

4. Surface Facilities update in OGIS on:

N/A

5. State/Fee well(s) attached to bond(s) in **RBDMS** on:

8/26/2016

6. Surface Facilities update in RBDMS on:

N/A

COMMENTS:

From: Blue Tip Castlegate, Inc.
To: Liberty Pioneer Energy Source, Inc.
Effective: 7/1/2016

Well Name	Sec	TWN	RNG	API Number	Entity	Mineral	Surface	Туре	Status
CASTLEGATE ST 1-35-12-10 WD	35	110S	100E	4301332308	13472	State	State	WD	Α
JENSEN 9-10-12-10	10	120S	100E	4300730159	12906	Fee	Fee	GW	Р
JENSEN 5-10-12-10	10	1208	100E	4300730162	12905	Fee	Fee	GW	Р
JENSEN 16-9-12-10	9	120S	100E	4300730163	12904	Fee	Fee	GW	Р
JENSEN 11-10-12-10	10	1208	100E	4300730164	11405	Fee	Fee	GW	Р
CASTLEGATE ST 1-16-12-10	16	120S	100E	4300730589	12610	State	State	GW	Р
JENSEN 1-10-12-10	10	120S	100E	4300730596	12611	Fee	Fee	GW	Р
JENSEN 1-9-12-10	9	1208	100E	4300730717	12903	Fee	Fee	GW	P
JENSEN 2-9-12-10	9	1208	100E	4300730735	13317	Fee	Fee	GW	Р
JENSEN 1-15-12-10	15	1208	100E	4300730736	13072	Fee	Fee	GW	Р
JENSEN 1-8-12-10	8	120S	100E	4300730768	13359	Fee	Fee	GW	Р
JENSEN DEEP 7-15-12-10	15	120S	100E	4300730786	13247	Fee	Fee	GW	Р
JENSEN 23C-9-12-10	9	120S	100E	4300731211	15770	Fee	Fee	GW	Р
JENSEN 33C-9-12-10	9	120S	100E	4300731212	15769	Fee	Fee	GW	Р
JENSEN 43C-9-12-10	9	120S	100E	4300731214	15768	Fee	Fee	GW	Р
CASTLEGATE FED 22C-9-12-10	9	1208	100E	4300731225	15767	Federal	Federal	GW	Р
JENSEN 41C-9-12-10	9	120S	100E	4300731452	17246	Fee	Fee	GW	P
JENSEN 14C-10-12-10	10	120S	100E	4300731453	17235	Fee	Fee	GW	Р
JENSEN FED 6-10-12-10	10	120S	100E	4300750177	18209	Federal	Fee	GW	Р
SHIMMIN TRUST 5-14-12-10	14	120S	100E	4300730122	14175	Fee	Fee	GW	S
CASTLEGATE FED 7-9-12-10	9	120S	100E	4300730137	12991	Federal	Federal	GW	S
SHIMMIN TRUST 11-11-12-10	11	120S	100E	4300730166	11410	Fee	Fee	GW	S
SHIMMIN TRUST 2-11-12-10	11	120S	100E	4300730659	13070	Fee	Fee	GW	S
SHIMMIN TRUST 4-14-12-10	14	120S	100E	4300730662	13071	Fee	Fee	GW	S
SHIMMIN TRUST 1-11-12-10	11	120S	100E	4300730673	12901	Fee	Fee	GW	S
JENSEN 1-18-12-10	18	1208	100E	4300730718	14226	Fee	Fee	GW	S
JENSEN 1-4-12-10	4	120S	100E	4300730733	13068	Fee	Fee	GW	S
JENSEN 2-8-12-10	8	120S	100E	4300730734	13275	Fee	Fee	GW	S
CASTLEGATE ST 4-16-12-10	16	120S	100E	4300730785	13318	State	State	GW	S
CASTLEGATE ST 11-16H-12-10	16	120S	100E	4300730961	14224	State	State	GW	S
JENSEN 42C-9-12-10	9	120S	100E	4300731213	15766	Fee	Fee	GW	S
JENSEN 2C-9	9	120S	100E	4300750179	18242	Fee	Fee	GW	S
JENSEN ST 11C-34-11-9	34	1108	090E	4304930024	17071	State	Fee	GW	S

FORM 9 STATE OF UTAH **DEPARTMENT OF NATURAL RESOURCES** 5. LEASE DESIGNATION AND SERIAL NUMBER: DIVISION OF OIL, GAS AND MINING SEE ATTACHED LIST 6. IF INDIAN, ALLOTTEE OR TRIBE NAME: SUNDRY NOTICES AND REPORTS ON WELLS 7. UNIT or CA AGREEMENT NAME: Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals. 8. WELL NAME and NUMBER: 1. TYPE OF WELL OIL WELL GAS WELL X OTHER SEE ATTACHED LIST 9. API NUMBER: 2. NAME OF OPERATOR: SEE ATTACHED LIST Liberty Pioneer Energy Source, Inc. 10. FIELD AND POOL, OR WILDCAT: 3. ADDRESS OF OPERATOR: PHONE NUMBER: (801)224-4771 1411 E 840 N Orem UT _{7!P} 84097 CITY 4. LOCATION OF WELL FOOTAGES AT SURFACE: COUNTY: SEE ATTACHED LIST QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: STATE: **UTAH** CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA 11. TYPE OF SUBMISSION TYPE OF ACTION ACIDIZE DEEPEN REPERFORATE CURRENT FORMATION NOTICE OF INTENT (Submit in Duplicate) ALTER CASING FRACTURE TREAT SIDETRACK TO REPAIR WELL Approximate date work will start: CASING REPAIR **NEW CONSTRUCTION** TEMPORARILY ARANDON CHANGE TO PREVIOUS PLANS OPERATOR CHANGE **TUBING REPAIR CHANGE TUBING** PLUG AND ABANDON VENT OR FLARE SUBSEQUENT REPORT WATER DISPOSAL CHANGE WELL NAME PLUG BACK (Submit Original Form Only) **CHANGE WELL STATUS** PRODUCTION (START/RESUME) WATER SHUT-OFF Date of work completion: COMMINGLE PRODUCING FORMATIONS RECLAMATION OF WELL SITE OTHER: **RECOMPLETE - DIFFERENT FORMATION** CONVERT WELL TYPE DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. CHANGE OF OPERATOR PREVIOUS OPERATOR: **NEW OPERATOR:** Liberty Pioneer Energy Source, Inc. N2955 Blue Tip Castlegate, Inc. N3 15810 Park Ten Place - Suite 160 1411 East 840 North Houston, TX 77084 Orem, UT 84097 Phone (281) 994-3800 Phone (801) 224-4771 RECEIVED Operator Number N3680 Operator Number N2855 JUL 21 2016 DIV. OF OIL, GAS & MINING Be advised that Liberty Pioneer Energy Source, Inc. is responsible under the terms and conditions of the related leases for the operations conducted upon the leased lands. Bond coverage is covered by Bond No. RLB0012097.

(This space for State use only)

NAME (PLEASE PRINT)

SIGNATURE

Kimball Hodges

APPROVED

TITLE Vice President of Liberty Pioneer Energy Source, Inc.

AUG 2 6 2003

DATE

BTC WELL NUMBER	WELL NAME AND NUMBER	LEGAL DESCRIPTION	OPERATOR	API	COUNTY	STAT
	JENSEN 1-4-12-10	Salt Lake Meridian T12S R10E Sec 04: SWSE	BLUE TIP CASTLEGATE INC.	43-007-30733-0000	CARBON	UTAH
2080002	JENSEN 1-8-12-10	Salt Lake Meridian T12S R10E Sec 08: NESE	BLUE TIP CASTLEGATE INC.	43-007-30768-0000	CARBON	UTAH
2080003	JENSEN 2-8-12-10	Salt Lake Meridian T12S R10E Sec 08: NENE	BLUE TIP CASTLEGATE INC.	43-007-30734-0000	CARBON	UTAH
2080004	CASTLEGATE FED 22C-9-12-10	Salt Lake Meridian T12S R10E Sec 09: SENW	BLUE TIP CASTLEGATE INC.	43-007-31225-0000	CARBON	UTAH
2080005	CASTLEGATE FED 7-9-12-10	Salt Lake Meridian T12S R10E Sec 09: SWNF	BLUE TIP CASTLEGATE INC.	43-007-30137-0000	CARBON	UTAH
2080006	JENSEN 1-9-12-10	Salt Lake Meridian T12S R10E Sec 09: NWSW	BLUE TIP CASTLEGATE INC.	43-007-30717-0000	CARBON	UTAH
2080007	JENSEN 2-9-12-10	Salt Lake Meridian T12S R10E Sec 09: NFNW	BLUE TIP CASTLEGATE INC.	43-007-30735-0000	CARBON	UTAH
2080008	JENSEN 16-9-12-10	Salt Lake Meridian T12S R10E Sec 09: SESE	BLUE TIP CASTLEGATE INC.	43-007-30163-0000	CARBON	UTAH
2080009	JENSEN 23C-9-12-10	Salt Lake Meridian T12S R10E Sec 09: NESW	BLUE TIP CASTLEGATE INC.	43-007-31211-0000	CARBON	UTAH
2080010	JENSEN 33C-9-12-10	Salt Lake Meridian T12S R10E Sec 09: NWSE	BLUE TIP CASTLEGATE INC.	43-007-31212-0000	CARBON	UTAH
2080011	JENSEN 42C-9-12-10	Salt Lake Meridian T12S R10E Sec 09: SENE	BLUE TIP CASTLEGATE INC.	43-007-31213-0000	CARBON	UTAH
2080012	JENSEN 43C-9-12-10	Salt Lake Meridian T12S R10E Sec 09: NESE	BLUE TIP CASTLEGATE INC.	43-007-31214-0000	CARBON	UTAH
2080013	JENSEN 1-10-12-10	Salt Lake Meridian T12S R10E Sec 10: NWSW	BLUE TIP CASTLEGATE INC.	43-007-30596-0000	CARBON	UTAH
2080014	JENSEN 5-10-12-10	Salt Lake Meridian T12S R10E Sec 10: SWNW	BLUE TIP CASTLEGATE INC.	43-007-30162-0000	CARBON	UTAH
2080015	JENSEN 11-10-12-10	Salt Lake Meridian T12S R10E Sec 10: NESW	BLUE TIP CASTLEGATE INC.	43-007-30164-0000	CARBON	UTAH

ATTACHED LIST to Change of Operator Sundry Notice

STC WELL NUMBER	WELL NAME AND NUMBER	LEGAL DESCRIPTION	OPERATOR	API	COUNTY	STAT
2080016	JENSEN 14C-10-12-10 -	Salt Lake Meridian T12S R10E Sec 10: SWSW	BLUE TIP CASTLEGATE INC.	43-007-31453-0000	CARBON	UTAH
2080017	SHIMMIN TRUST 1-11-12-10	Salt Lake Meridian T12S R10E Sec 11: SWSW	BLUE TIP CASTLEGATE INC.	43-007-30673-0000	CARBON	UTAH
2080018	SHIMMIN TRUST 2-11-12-10	Salt Lake Meridian T12S R10E Sec 11: SESE	BLUE TIP CASTLEGATE INC.	43-007-30659-0000	CARBON	UTAH
2080019	SHIMMIN TRUST 4-14-12-10	Salt Lake Meridian T12S R10E Sec 14: SENW	BLUE TIP CASTLEGATE INC.	43-007-30662-0000	CARBON	UTAH
2080020	SHIMMIN TRUST 5-14-12-10	Salt Lake Meridian T12S R10E Sec 14: NWNE	BLUE TIP CASTLEGATE INC.	43-007-30122-0000	CARBON	UTAH
2080021	JENSEN 1-15-12-10	Salt Lake Meridian T12S R10E Sec 15: SWNE	BLUE TIP CASTLEGATE INC.	43-007-30736-0000	CARBON	UTAH
2080022	JENSEN DEEP 7-15-12-10	Salt Lake Meridian T12S R10E Sec 15: SWNE	BLUE TIP CASTLEGATE INC.	43-007-30786-0000	CARBON	UTAH
2080023	CASTLEGATE ST 1-16-12-10	Salt Lake Meridian T12S R10E	BLUE TIP CASTLEGATE INC.	43-007-30589-0000	CARBON	UTAH
2080024	CASTLEGATE ST 4-16-12-10	Sec 16: NWNF Salt Lake Meridian T12S R10E	BLUE TIP CASTLEGATE INC.	43-007-30785-0000	CARBON	UTAH
2080025	JENSEN 1-18-12-10	Sec 16: SENW Salt Lake Meridian T12S R10E Sec 18: NESE	BLUE TIP CASTLEGATE INC.	43-007-30718-0000	CARBON	UTAH
2080026	CASTLEGATE ST 1-35-12-10 WD	Salt Lake Meridian T11S R10E Sec 35: SWSW	BLUE TIP CASTLEGATE INC.	43-013-32308-0000	DUCHESNE	UTAH
2080027	CASTLEGATE ST 11-16H-12-10	Salt Lake Meridian T12S R10E Sec 16: NWNW	BLUE TIP CASTLEGATE INC.	43-007-30961-0000	CARBON	UTAH
2080028	JENSEN STATE 11C-34-11-9	Salt Lake Meridian T11S R9E Sec 34: NWNW	BLUE TIP CASTLEGATE INC.	43-049-30024-0000	UTAH	UTAH
2080030	JENSEN 41C-9-12-10	Salt Lake Meridian T12S R10E Sec 09: NENE	BLUE TIP CASTLEGATE INC.	43-007-31452-0000	CARBON	UTAH

ATTACHED LIST to Change of Operator Sundry Notice

BTC WELL NUMBER	WELL NAME AND NUMBER	LEGAL DESCRIPTION	OPERATOR	API	COUNTY	STATE
2080032	JENSEN 9-10-12-10	Salt Lake Meridian T12S R10E Sec 10: NESE	BLUE TIP CASTLEGATE INC.	43-007-30159-0000	CARBON	UTAH
2080033	SHIMMIN TRUST 11-11-12-10	Salt Lake Meridian T12S R10E Sec 11: NESW	BLUE TIP CASTLEGATE INC.	43-007-30166-0000	CARBON	UTAH
2080042	JENSEN 2C-9-12-10	Salt Lake Meridian T12S R10E Sec 9: NW4NE4	BLUE TIP CASTLEGATE INC.	43-007-01790-0000 50179	CARBON	UTAH
2080043	JENSEN FED 6-10-12-10	Salt Lake Meridian T12S R10E Sec 6: SE4NW4	BLUE TIP CASTLEGATE INC.	43-007-50177-0000	CARBON	UTAH

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

TRANSFER OF AUTHORITY TO INJECT				
Well Name and Number Castlegate St 1-35-12-10		API Number 4301332308		
Location of Well	Duchana	Field or Unit Name Castlegate		
Footage: 540' FSL, 1135' FWL OO. Section. Township. Range: SWSW 35 11S 10	County : Duchesne	Lease Designation and Number ML-48822		

EFFECTIVE DATE OF TRANSFER: 7/1/2016

RRENT OP	PERATOR			
Company:	Blue Tip Castlega	ate, Inc.	Name:	Bruce L. Taylor
Address:	P. O. Box 842317	7	Signature:	Koure I Tayle
	city Houston	state TX zip 77284	Title:	Secretary
Phone:	(281) 944-3800		Date:	7/1/2016
Comments:	:			

Company:	WEM Castlega	te, LLC	_ Name:	Cory ensen
ddress:	1411 East 840	North	Signature:	Cours
	city Orem	state UT zip 84097	Title:	Manager
hone:			Date:	7/11/16
omments	:			·

(This space for State use only)

Transfer approved by: .

Title:

Approval Date:

Comments:

RECEIVED

JUL 21 2016



Dustin K. Doucet
Petroleum Engineer
Division of Oil, Gas and Mining
1594 West North Temple, Ste 1210
Salt Lake City, Utah 84116

RE: Bonding for Castlegate Field Wells

August 15, 2016

Dustin:

Blue Tip Energy Management, LLC was the previous operator and bondholder of the Castle Gate Field and associated wells listed below. Liberty Pioneer Energy Source, Inc. ("LPES") has submitted the necessary paperwork to take over as the new operator of theses wells. Per our recent communications we would like to make the following proposal pertaining to the bonding of the wells listed below so that all of the wells in the field will be covered by LPES blanket bond #RLB0012097.

1) LPES plans to P&A the following wells prior to November 1, 2016:

13318 CASTLEGATE ST 4-16-12-10 14224 CASTLEGATE ST 11-16H-12-10

2) LPES is currently getting pricing to build a pipeline to the following well which is believed to be capable of production. If pricing is reasonable, LPES will propose production testing and flaring. We will notify you of our decision to either run a pipeline or plug and abandon this well before the end of 2016. If the decision is to produce, LPES will commence the pipeline permitting process before the end of 2016:

17071 JENSEN STATE 11C-34-11-9

```
3) Wells that are currently producing or will be returned to producing status by October 1, 2016:
```

- 13070 SHIMMIN TRUST 2-11-12-10
- 13275 JENSEN 2-8-12-10
- 13071 SHIMMIN TRUST 4-14-12-10
- 13068 JENSEN 1-4-12-10
- 18242 JENSEN 2C-9-12-10
- 12991 CASTLEGATE FED 7-9-12-10
- 11405 JENSEN 11-10-12-10
- 12610 CASTLEGATE ST 1-16-12-10
- 12611 JENSEN 1-10-12-10
- 12903 JENSEN 1-9-12-10
- 12904 JENSEN 16-9-12-10
- 12905 JENSEN 5-10-12-10
- 12906 JENSEN 9-10-12-10
- 13072 JENSEN 1-15-12-10
- 13247 JENSEN DEEP 7-15-12-10
- 13317 JENSEN 2-9-12-10
- 13359 JENSEN 1-8-12-10
- 15766 JENSEN 42C-9-12-10
- 15767 CASTLEGATE FED 22C-9-12-10
- 15768 JENSEN 43C-9-12-10
- 15769 JENSEN 33C-9-12-10
- 15770 JENSEN 23C-9-12-10
- 17235 JENSEN 14C-10-12-10
- 17246 JENSEN 41C-9-12-10
- 14226 JENSEN 1-18-12-10
- 11410 SHIMMIN TRUST 11-11-12-10
- 12901 SHIMMIN TRUST 1-11-12-10
- 14175 SHIMMIN TRUST 5-14-12-10
- 18209 JENSEN 6-10-12-10

Thanks for your help. Please let us know if you have any questions.

Sincerely,

Daniel R. Gunnell

President

Liberty Pioneer Energy Source, Inc.

1411 East 840 North

Orem, UT 84097



Rachel Medina <rachelmedina@utah.gov>

Fwd: LPES plans for the Castlegate field wells/Bonding

2 messages

Dayne Doucet <daynedoucet@utah.gov>

Wed, Aug 17, 2016 at 11:46 AM

To: Rachel Medina <rachelmedina@utah.gov>, Randy Thackeray <randythackeray@utah.gov>

FYI

----- Forwarded message -----

From: Daniel Gunnell <dgunnell@rockiesstandard.com>

Date: Wed, Aug 17, 2016 at 9:40 AM

Subject: Re: LPES plans for the Castlegate field wells/Bonding

To: Dustin Doucet <dustindoucet@utah.gov>

Cc: Brad Gunnell bgunnell@rockiesstandard.com, Cory Jensen censen@rockiesstandard.com, Kimball

Hodges <khodges@rockiesstandard.com>, Dayne Doucet <daynedoucet@utah.gov>, Joshua Payne

<joshuapayne@utah.gov>

Dustin:

Thanks for your help with this! Please find Bond Proposal Letter attached.

If there is anything else you need please let me know. The Blue Tip guys are anxious to get their bond released.

Let me know if I need to send a hard copy of the letter.

Best,

Danny

On Mon, Aug 8, 2016 at 9:24 AM, Dustin Doucet <dustindoucet@utah.gov> wrote:

Danny,

Yes if you would just edit your previous plan and resubmit so there is no confusion. I think that would make it cleaner. If you decide to put a well online and have it online by the plugging deadline, then that should be fine.

Dustin

On Tue, Aug 2, 2016 at 4:31 PM, Daniel Gunnell <dgunnell@rockiesstandard.com> wrote:

Dustin:

Sorry for not getting back to you on this until now. There maybe a couple of wells that we may come back to you specifically on, but I think that we have now got a pretty good go forward plan that will meet and exceed your end of the year time frame for getting the wells in categories 2 and 3 in production.

There is one material change to my previous email that we want to make you aware of - instead of plugging the 11C-34 we are seriously considering running a pipeline to it and bringing online... not a final decision yet, but we are have got and are getting additional bids, and designing a test plan to better understand what production would look like.

Do I need to submit a formal letter with dates of Nov 1 for plugging and end of year to get wells on production under our existing bonds or are these emails sufficient?

Thanks for your help!

Best.

Danny

What time do you think you need? I would think by the end of the year max. If you can line out more justification, I'm open to listening to the reasoning.

Dustin

On Thu, Jun 30, 2016 at 12:21 PM, Daniel Gunnell <dgunnell@rockiesstandard.com> wrote:
Dustin:

Sounds good. Thanks for your help.

Can we push back just a little to get as much time as possible for shut in wells that we need to come up with a plan for or plug (#2 in my original email?) - how much beyond Oct 2016 could you give us? We are going to be really busy so as much extra time as you can give really helps... we are reclaiming those evaporation ponds immediately, taking over operations, retrofitting the plant, plugging the identified wells, and ramping up production by reworking multiple shut-in wells that are we have already reviewed.

Let me know and thanks again.

Best,

Danny

On Thu, Jun 30, 2016 at 10:30 AM, Dustin Doucet <dustindoucet@utah.gov> wrote: Danny,

I would be o.k. with the timing and plan on part 1. The timing on part 2 does not work. Those have been SI/TA anywhere from 2.5 to 5 years. Did you mean October 2016? Our discussions were if you had a plan to produce or plug within a short period (meaning a few months), then we could forego increased bonding but increased bonding would be necessary if that wasn't accomplished. Part 3 would be similar to part 2 on the wells that have been SI/TA. The producing ones would probably be fine as you have 1 year allowed by rule (see below).

2016

Production data through Jan 2016

13070	SHIMMIN TRUST 2-11-12-10 SI since Sep 2014
13275	JENSEN 2-8-12-10 SI since Nov 2015
13071	SHIMMIN TRUST 4-14-12-10 SI since Dec 2015
13068	JENSEN 1-4-12-10 Produced 1 day in Jan 2016
18242	JENSEN 2C-9-12-10 Producing
12991	CASTLEGATE FED 7-9-12-10 Producing
11405	JENSEN 11-10-12-10 Producing
12610	CASTLEGATE ST 1-16-12-10 Producing
12611	JENSEN 1-10-12-10 Producing
12903	JENSEN 1-9-12-10 Producing
12904	JENSEN 16-9-12-10 Producing
12905	JENSEN 5-10-12-10 Producing
12906	JENSEN 9-10-12-10 Producing
13072	JENSEN 1-15-12-10 Produced 1 day in Jan 2016
13247	JENSEN DEEP 7-15-12-10 Produced 1 day in Jan

13359	JENSEN 1-8-12-10 Producing
15766	JENSEN 42C-9-12-10 Producing
15767	CASTLEGATE FED 22C-9-12-10 Producing
15768	JENSEN 43C-9-12-10 Producing
15769	JENSEN 33C-9-12-10 Producing
15770	JENSEN 23C-9-12-10 SI since Nov 2015
17235	JENSEN 14C-10-12-10 Producing
17246	JENSEN 41C-9-12-10 Producing
18209	JENSEN 6-10-12-10 Producing

On Fri, Jun 24, 2016 at 11:28 AM, Daniel Gunnell dgunnell@rockiesstandard.com wrote:

Dustin:

Per our recent conversation, I wanted to informally run our plans/bonding proposal for the Castle Gate Field by you for your comment prior to submitting a final proposal. Here is what we are considering:

Blue Tip Energy Management, LLC ("Blue Tip"), is the current operator and bondholder, of the Castle Gate Field and associated wells listed below ("Wells"). LPES should take over as the new operator effective July 1 2016. In anticipation of the transfer of operations and per our recent phone conversation we would like to make the following proposal pertaining to the LPES bonding of the wells listed below so that all of the wells in the field will be covered by LPES blanket bond #RLB0012097.

1) LPES will P&A the following wells prior to November 1, 2016:

17071 JENSEN STATE 11C-34-11-9

14224 CASTLEGATE ST 11-16H-12-10

2) LPES will evaluate and propose a go forward plan after evaluation on the following shut-in wells prior to October 1 2017:

13318 CASTLEGATE ST 4-16-12-10
14226 JENSEN 1-18-12-10
11410 SHIMMIN TRUST 11-11-12-10
12901 SHIMMIN TRUST 1-11-12-10

14175 SHIMMIN TRUST 5-14-12-10

	State of Utah Mail - Fwd: LPES plans
13070	SHIMMIN TRUST 2-11-12-10
13275	JENSEN 2-8-12-10
13071	SHIMMIN TRUST 4-14-12-10
13068	JENSEN 1-4-12-10
18242	JENSEN 2C-9-12-10
12991	CASTLEGATE FED 7-9-12-10
11405	JENSEN 11-10-12-10
12610	CASTLEGATE ST 1-16-12-10
12611	JENSEN 1-10-12-10
12903	JENSEN 1-9-12-10
12904	JENSEN 16-9-12-10
12905	JENSEN 5-10-12-10
12906	JENSEN 9-10-12-10
13072	JENSEN 1-15-12-10
13247	JENSEN DEEP 7-15-12-10
13317	JENSEN 2-9-12-10
13359	JENSEN 1-8-12-10
15766	JENSEN 42C-9-12-10
15767	CASTLEGATE FED 22C-9-12-10
15768	JENSEN 43C-9-12-10
15769	JENSEN 33C-9-12-10
15770	JENSEN 23C-9-12-10
17235	JENSEN 14C-10-12-10
17246	JENSEN 41C-9-12-10

JFNSFN 6-10-12-10

18209

If this proposal is acceptable please let me know and I will submit a formal letter for approval. Thanks for your help.

Best,

Danny

Daniel R. Gunnell 1411 East 840 North Orem, UT 84097 (801) 224-4771

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Dustin K. Doucet Petroleum Engineer Division of Oil, Gas and Mining 1594 West North Temple, Ste 1210 Salt Lake City, Utah 84116 801.538.5281 (ofc) 801.359.3940 (fax)

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Dayne Doucet Petroleum Engineer UDOGM 801-538-5303

Statewide Bond Proposal.pdf

Dustin Doucet <dustindoucet@utah.gov>

Wed, Aug 17, 2016 at 2:01 PM

To: Daniel Gunnell <dgunnell@rockiesstandard.com>, Rachel Medina <rachelmedina@utah.gov>

Cc: Brad Gunnell

bgunnell@rockiesstandard.com, Cory Jensen <cjensen@rockiesstandard.com, Kimball Hodges khodges@rockiesstandard.com, Dayne Doucet daynedoucet@utah.gov, Joshua Payne joshuapayne@utah.gov)

Danny,

I think that looks fine. If the deadlines aren't met we will be looking for full cost bonding in addition to getting the wells back into compliance. I have copied Rachel Medina on this email so she can proceed with the operator change with this plan and conditions. thanks.